DCR-TRV33/TRV33E

RMT-814

SERVICE MANUAL

LEVEL 2

Ver 1.4 2004. 09

Revision History

Photo : DCR-TRV33

US Model
Canadian Model
Korea Model
DCR-TRV33
AEP Model
UK Model
North European Model
East European Model
Chinese Model
Australian Model
DCR-TRV33E
E Model
Hong Kong Model
Tourist Model
DCR-TRV33/TRV33E

Z MECHANISM

Link

SPECIFICATIONS	BLOCK DIAGRAMS	PRINTED WIRING BOARDS
SERVICE NOTE	FRAME SCHEMATIC DIAGRAMS	REPAIR PARTS LIST
DISASSEMBLY	SCHEMATIC DIAGRAMS	

- For INSTRUCTION MANUAL, refer to SERVICE MANUAL, LEVEL 1 (987622341.pdf).
- For MECHANISM ADJUSTMENTS, refer to the “DV MECHANICAL ADJUSTMENT MANUAL Ⅶ Z MECHANISM ” (9-876-210-11).
- Reference No. search on printed wiring boards is available.

On the VC-313 board

This service manual provides the information that is premised the circuit board replacement service and not intended repair inside the VC-313 board.

Therefore, schematic diagram, printed wiring board, waveforms, mounted parts location and electrical parts list of the VC-313 board are not shown.

The following pages are not shown.

Schematic diagram ..... Pages 4-37 to 4-64
Printed wiring board ..... Pages 4-85 to 4-88
Waveforms ..... Pages 4-91 to 4-92
Mounted parts location ..... Page 4-95
Electrical parts list ..... Pages 5-21 to 5-26

Mini DV Digital Video Cassette

DIGITAL VIDEO CAMERA RECORDER

SONY

COVER

Self Diagnosis Supported model Digital Handycam InfoLITHIUM M SERIES Cassette Memory MEMORY STICK

SPECIFICATIONS

Video camera recorder

System

Video recording system
2 rotary heads
Helical scanning system
Audio recording system
Rotary heads, PCM system
Quantization: 12 bits (Fs 32 kHz, stereo 1, stereo 2), 16 bits (Fs 48 kHz, stereo)
Video signal
DCR-TRV33:
NTSC color, EIA standards
DCR-TRV33E:
PAL colour, CCIR standards
Usable cassette
Mini DV cassette with the Mini DV mark printed
Tape speed
SP: Approx. 18.81 mm/s
LP: Approx. 12.56 mm/s
Recording/playback time (using cassette DVM60)
SP: 1 hour
LP: 1.5 hours
Fastforward/rewind time (using cassette DVM60)
Approx. 2 min. and 40 seconds
Viewfinder
Electric viewfinder (colour)
Image device
3.8 mm (1/4.7 type)
CCD (Charge Coupled Device)
Gross: Approx. 1 070 000 pixels
Effective (still):
Approx. 1 000 000 pixels
Effective (moving):
Approx. 690 000 pixels
Lens
Carl Zeiss Vario-Sonnar
Combined power zoom lens
Filter diameter: 30 mm (1 3/16 in)
10× (Optical), 120× (Digital)
F = 1.8 – 2.0
Focal length
3.7 – 37 mm (5/32 – 1 1/2 in.)[1)]
50 – 500 mm (2 – 19 3/4 in.)[2)]
42 – 420 mm (1 11/16 – 16 5/8 in.)[3)]

[1)] When converted to a 35 mm still camera
[2)] In CAMERA mode
[3)] In MEMORY mode

Colour temperature
Auto, HOLD, INDOOR (3 200 K), OUTDOOR (5 800 K)
Minimum illumination
7 lx (lux) (F 1.8)
0 lx (lux) (in the NightShot mode)*
* Objects unable to be seen due to the dark can be shot with infrared lighting.

Input/Output connectors

S video input /output
4-pin mini DIN
Luminance signal: 1 Vp-p, 75 Ω (ohms), unbalanced
Chrominance signal:
DCR-TRV33: 0.286 Vp-p,
DCR-TRV33E: 0.3 Vp-p,
75 Ω (ohms), unbalanced
Audio/Video input /output
AV MINI JACK, 1 Vp-p, 75 Ω (ohms), unbalanced
327 mV, (at output impedance more than 47 kΩ (kilohms))
Output impedance with less than 2.2 kΩ (kilohms)/Stereo minijack (ø 3.5 mm)
Input impedance more than 47 kΩ (kilohms)
DV input/output
4-pin connector
Headphone jack
Stereo minijack (ø 3.5 mm)
LANC jack
Stereo mini-minijack (ø 2.5 mm)
USB jack
mini-B
MIC jack
Minijack, 0.388 mV low impedance with 2.5 to 3.0 V DC, output impedance 6.8 kΩ (kilohms) (ø 3.5 mm)
Stereo type

LCD screen

Picture
6.2 cm (2.5 type)
50.3 × 37.4 mm (2 × 1 1/2 in.)
Total dot number
123 200 (560 × 220)

General

Power requirements
7.2 V (battery pack)
8.4 V (AC Adaptor)
Average power consumption (when using the battery pack)
DCR- TRV33 : 4.1 W[1)]
DCR- TRV33E: 4.0 W[1)]
DCR- TRV33 : 3.3 W[2)]
DCR- TRV33E: 3.2 W[2)]

[1)] During camera recording using LCD
[2)] Viewfinder

Operating temperature
0°C to 40°C (32°F to 104°F)
Storage temperature
–20°C to + 60°C
(–4°F to + 140°F)
Dimensions (approx.)
71 × 90 × 112 mm
(2 7/8 × 3 5/8 × 4 1/2 in.) (w/h/d)
Mass (approx.)
Main unit only
540 g (1 lb 2 oz)
Including the rechargeable battery pack NP-FM30, cassette DVM60 and lens cap
630 g (1 lb 5 oz)

Supplied accessories
See page 3.

AC Adaptor AC-L15A/L15B

Power requirements
100 – 240 V AC, 50/60 Hz
Current consumption
0.35 – 0.18 A
Power consumption
18 W
Output voltage
DC OUT: 8.4 V, 1.5 A
Operating temperature
0°C to 40°C (32°F to 104°F)
Storage temperature
–20°C to + 60°C
(–4°F to + 140°F)
Dimensions (approx.)
56 × 31 × 100 mm
(2 1/4 × 1 1/4 × 4 in.) (w/h/d)
excluding projecting parts
Mass (approx.)
190 g (6.7 oz)
excluding power cord

Rechargeable battery pack NP-FM30

Maximum output voltage
DC 8.4 V
Output voltage
DC 7.2 V
Capacity
5.0 Wh (700 mAh)
Dimensions (approx.)
38.2 × 20.5 × 55.6 mm
(1 9/16 × 13/16 × 2 1/4 in.)
(w/h/d)
Mass (approx.)
65 g (2.3 oz)
Operating temperature
0°C to 40°C (32°F to 104°F)
Type
Lithium ion

"Memory Stick"

Memory
Flash memory
8MB: MSA-8A
Operating voltage
2.7 – 3.6 V
Power consumption
Approx. 45 mA during operation mode
Approx. 130 µA during tape recording standby
Dimensions (approx.)
50 × 2.8 × 21.5 mm
(2 × 1/8 × 7/8 in.) (w/h/d)
Mass (approx.)
4 g (0.14 oz)

Design and specifications are subject to change without notice.

CAUTION :
Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type.

SAFETY-RELATED COMPONENT WARNING!!

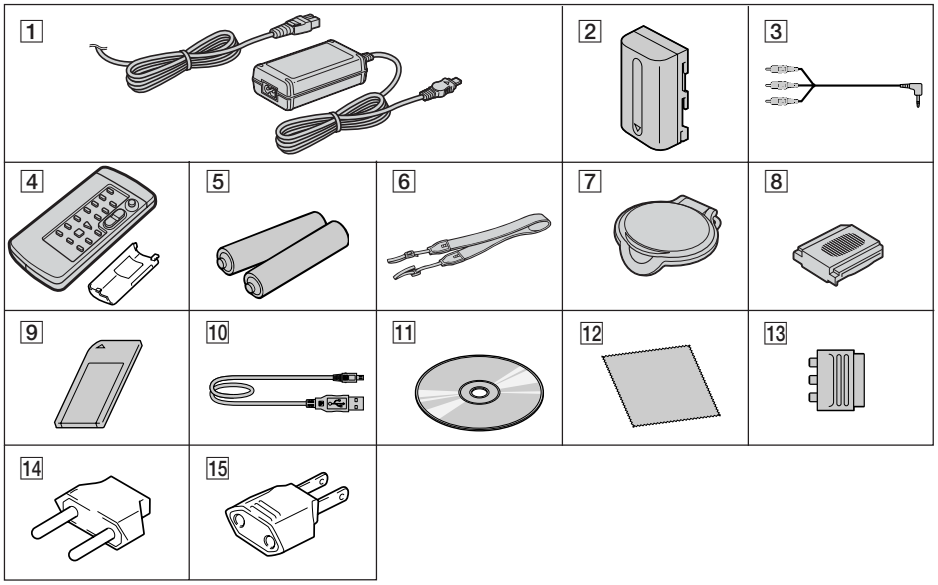
COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈSES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPÉMENTS PUBLIÉS PAR SONY.

• SUPPLIED ACCESSORIES

Make sure that the following accessories are supplied with your camcorder.



1 **AC-L15A/L15B AC Adaptor** (1), **Power cord** (1)
2 **NP-FM30 rechargeable battery pack** (1)
3 **A/V connecting cable** (1)
4 **Wireless Remote Commander** (1)
5 **R6 (size AA) battery for Remote Commander** (2)
6 **Shoulder strap** (1)
7 **Lens cap** (1)
8 **Shoe cover** (1)
9 **"Memory Stick"** (1)
10 **USB cable** (1)
11 **CD-ROM (SPVD-010 USB Driver)** (1)
12 **Cleaning cloth** (1)
13 **21-pin adaptor*** (1) (AEP, UK, EE, NE model only)

* The models with CE mark printed on their bottom surfaces only.

14 **2-pin conversion adaptor** (1) (DCR-TRV33 : JE / TRV33E : JE only)
15 **2-pin conversion adaptor** (1) (DCR-TRV33 : E, HK / TRV33E : E / HK only)

- Abbreviation
  EE : East European model
  NE : North European model
  JE : Tourist model

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer.

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
4. Look for parts which, through functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
5. Check the B+ voltage to see it is at the values specified.
6. Flexible Circuit Board Repairing
   - Keep the temperature of the soldering iron around 270˚C during repairing.
   - Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
   - Be careful not to apply force on the conductor when soldering or unsoldering.

Unleaded solder

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.
(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size.)

: LEAD FREE MARK

Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40°C higher than ordinary solder.
  Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
  Soldering irons using a temperature regulator should be set to about 350°C.
  Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity
  Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder
  It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

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Pages from 5-21 to 5-26 are not shown.

SECTION 1
SERVICE NOTE

1-1. SERVICE NOTE

1. POWER SUPPLY DURING REPAIRS

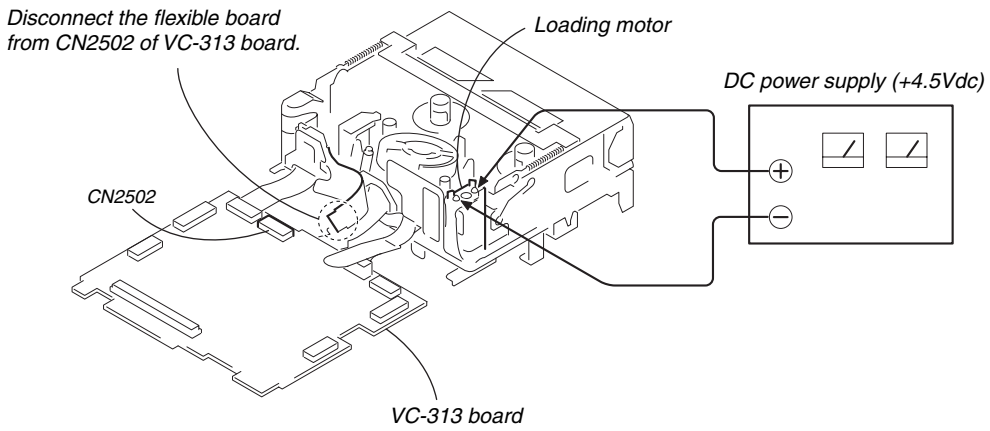
In this unit, about 10 seconds after power is supplied to the battery terminal using the regulated power supply (8.4V), the power is shut off so that the unit cannot operate.
This following two methods are available to prevent this. Take note of which to use during repairs.

Method 1.
Use the AC power adaptor (AC-L15, AC-VQ800 etc.).

Method 2.
Connect the servicing remote commander RM-95 (J-6082-053-B) to the LANC jack, and set the commander switch to the “ADJ” side.

2. TO TAKE OUT A CASSETTE WHEN NOT EJECT (FORCE EJECT)

① Refer to 2-2 to remove the cabinet (R) cover (40E).
② Refer to 2-3 to remove the F panel section.
③ Refer to 2-5 to remove the cabinet (R) section.
④ Refer to 2-10 to remove the BT panel/EVF section.
⑤ Refer to 2-14 to remove the VA-118 board and Lens section.
⑥ Refer to 2-16 to remove the VC-313 board and Mechanism deck.
⑦ Refer to 2-17 to remove the MD frame assembly from the VC-313 board and Mechanism deck.
⑧ Disconnect the flexible board from CN2502 of VC-313 board.
⑨ Supply +4.5V from the DC power supply to the loading motor and unload with a pressing the cassette compartment.



1-2. SELF-DIAGNOSIS FUNCTION

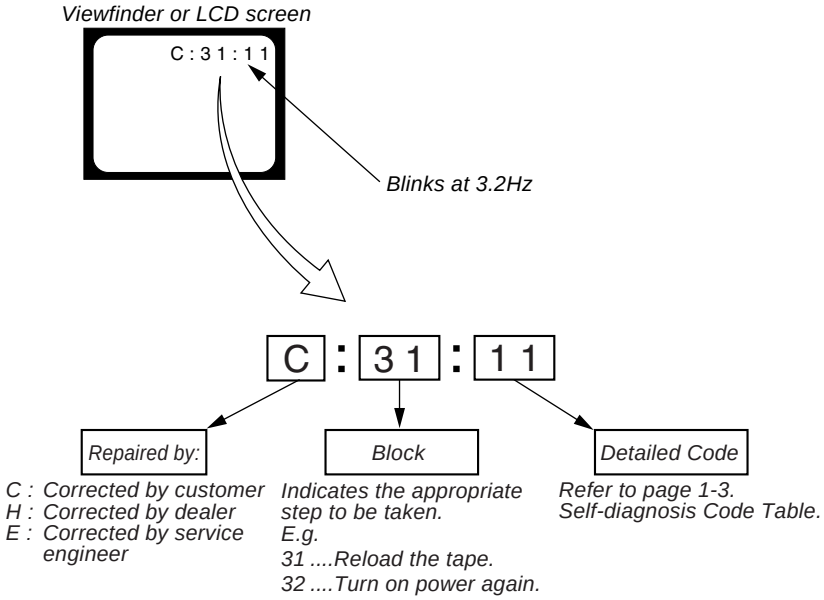
1. SELF-DIAGNOSIS FUNCTION

When problems occur while the unit is operating, the self-diagnosis function starts working, and displays on the viewfinder, or LCD screen what to do.

Details of the self-diagnosis functions are provided in the Instruction manual.

2. SELF-DIAGNOSIS DISPLAY

When problems occur while the unit is operating, the counter of the viewfinder or LCD screen consists of an alphabet and 4-digit number, which blinks at 3.2Hz. This 5-character display indicates the "repaired by:", "block" in which the problem occurred, and "detailed code" of the problem.


Viewfinder or LCD screen
C : 3 1 : 1 1
Blinks at 3.2Hz
C : 3 1 : 1 1
Repaired by:
Block
Detailed Code
C : Corrected by customer
H : Corrected by dealer
E : Corrected by service engineer
Indicates the appropriate step to be taken.
E.g.
31 ....Reload the tape.
32 ....Turn on power again.
Refer to page 1-3.
Self-diagnosis Code Table.

Note: The "self-diagnosis display" data will be kept even if the lithium battery (BT5201 of CK-129 board) is removed.

3. SELF-DIAGNOSIS CODE TABLE

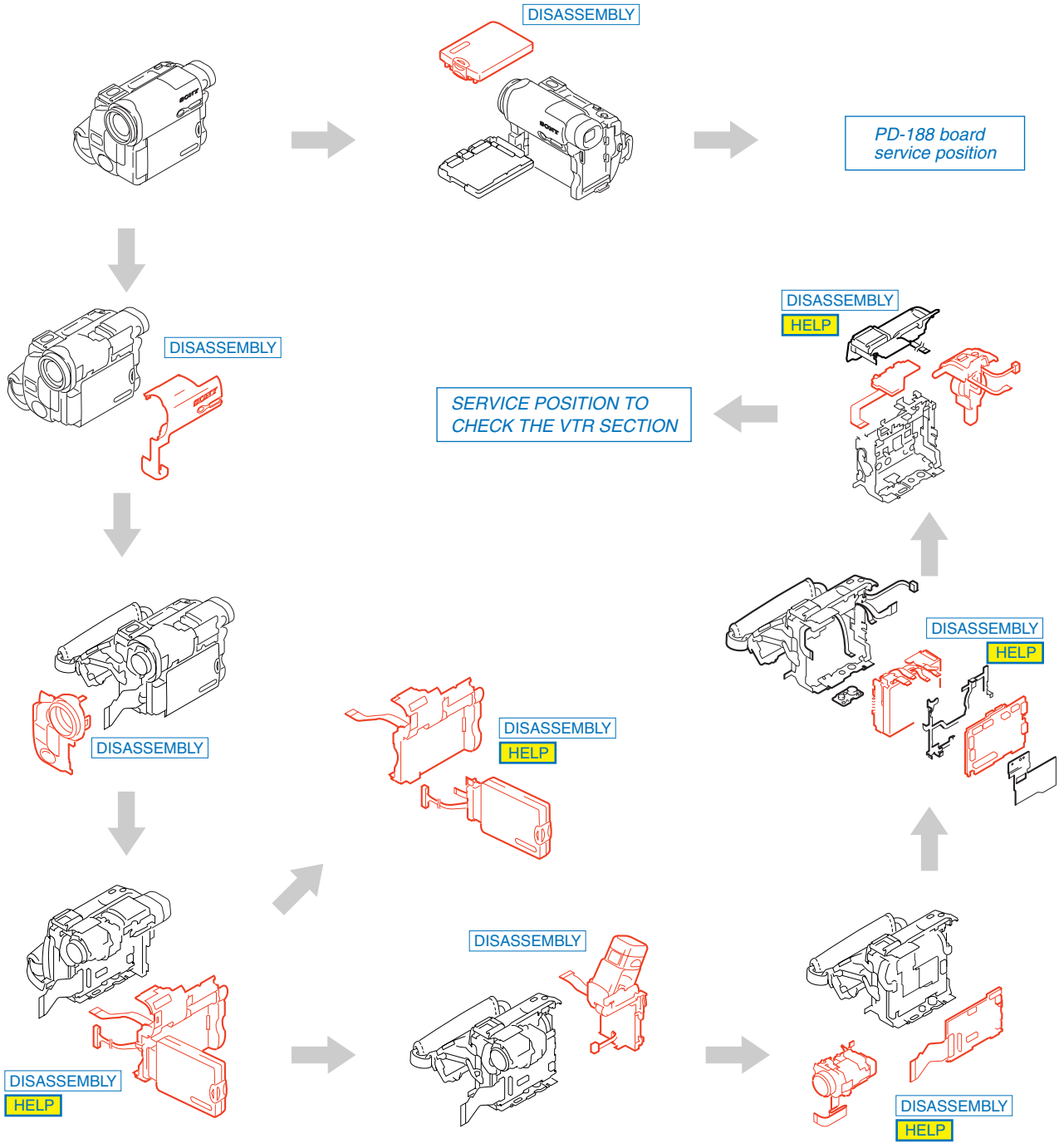
Self-diagnosis Code					Symptom/State	Correction
Repaired by:	Block Function		Detailed Code			
C	0	4	0	0	Non-standard battery is used.	Use the info LITHIUM battery.
C	2	1	0	0	Condensation.	Remove the cassette, and insert it again after one hour.
C	2	2	0	0	Video head is dirty.	Clean with the optional cleaning cassette.
C	3	1	1	0	LOAD direction. Loading does not complete within specified time	Load the tape again, and perform operations from the beginning.
C	3	1	1	1	UNLOAD direction. Loading does not complete within specified time	Load the tape again, and perform operations from the beginning.
C	3	1	2	0	T reel side tape slacking when unloading.	Load the tape again, and perform operations from the beginning.
C	3	1	2	1	Winding S reel fault when counting the rest of tape.	Load the tape again, and perform operations from the beginning.
C	3	1	2	2	T reel fault.	Load the tape again, and perform operations from the beginning.
C	3	1	2	3	S reel fault.	Load the tape again, and perform operations from the beginning.
C	3	1	2	4	T reel fault.	Load the tape again, and perform operations from the beginning.
C	3	1	3	0	FG fault when starting capstan.	Load the tape again, and perform operations from the beginning.
C	3	1	4	0	FG fault when starting drum.	Load the tape again, and perform operations from the beginning.
C	3	1	4	2	FG fault during normal drum operations.	Load the tape again, and perform operations from the beginning.
C	3	2	1	0	LOAD direction loading motor time-out.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3	2	1	1	UNLOAD direction loading motor time-out.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3	2	2	0	T reel side tape slacking when unloading.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3	2	2	1	Winding S reel fault when counting the rest of tape.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3	2	2	2	T reel fault.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3	2	2	3	S reel fault.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3	2	2	4	T reel fault.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3	2	3	0	FG fault when starting capstan.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3	2	4	0	FG fault when starting drum	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3	2	4	2	FG fault during normal drum operations	Remove the battery or power cable, connect, and perform operations from the beginning.
E	6	1	0	0	Difficult to adjust focus (Cannot initialize focus.)	Inspect the lens block focus MR sensor (Pin ⑲, ⑳ of CN1301 of VC-313 board) when focusing is performed when the focus buttons of the touch panel are pressed in the focus manual mode, and the focus motor drive circuit (IC1301 of VC-313 board) when the focusing is not performed.
E	6	1	1	0	Zoom operations fault (Cannot initialize zoom lens.)	Inspect the lens block zoom MR sensor (Pin ⑧, ⑩ of CN1301 of VC-313 board) when zooming is performed when the zoom lens is operated and the zoom motor drive circuit (IC1301 of VC-313 board) when zooming is not performed.
E	6	2	0	0	Steadyshot function does not work well. (With pitch angular velocity sensor output stopped.)	Inspect pitch angular velocity sensor (SE5402 of MA-421 board) peripheral circuits.
E	6	2	0	1	Steadyshot function does not work well. (With yaw angular velocity sensor output stopped.)	Inspect yaw angular velocity sensor (SE5401 of A-421 board) peripheral circuits.

COVER

SECTION 2
DISASSEMBLY

HELP

The following flow chart shows the disassembly procedure.



PROCEDURE OF REMOVING THE MECHANISM DECK. (VTR CHECK SERVICE POSITION)

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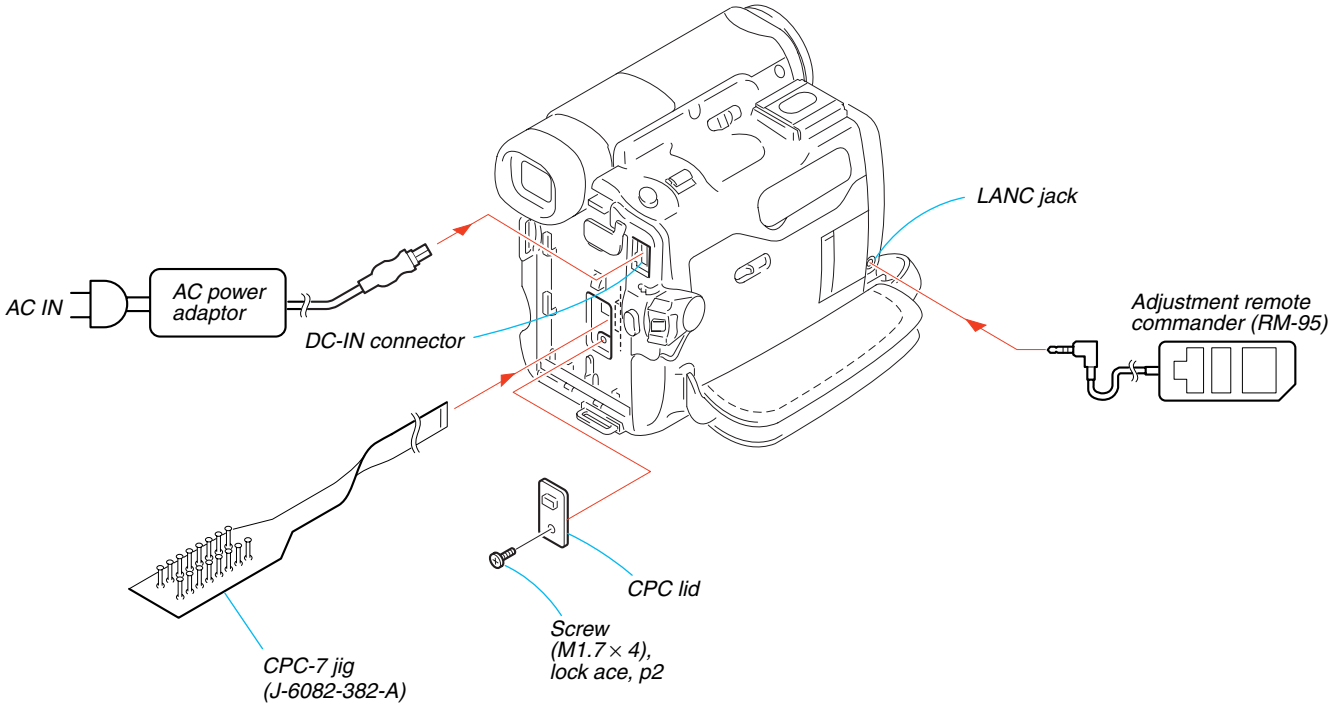
⑨ 2-19. CONTROL SWITCH BLOCK (FK-CX4000).... (page 2-18)
⑩ 2-20. JK-242 BOARD ..... (page 2-18)
⑪ SERVICE POSITION TO CHECK THE VTR SECTION..... (page 2-19)

NOTE: Follow the disassembly procedure in the numerical order given.

[CONNECTION OF EQUIPMENT]

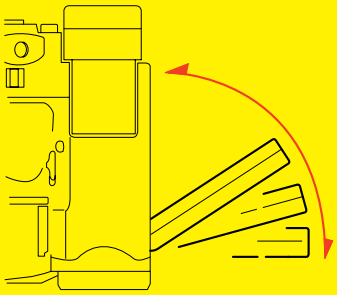


2-1. P CABINET (C) ASSEMBLY

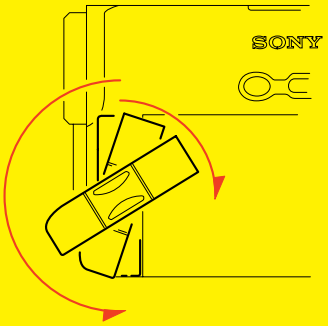
Caution

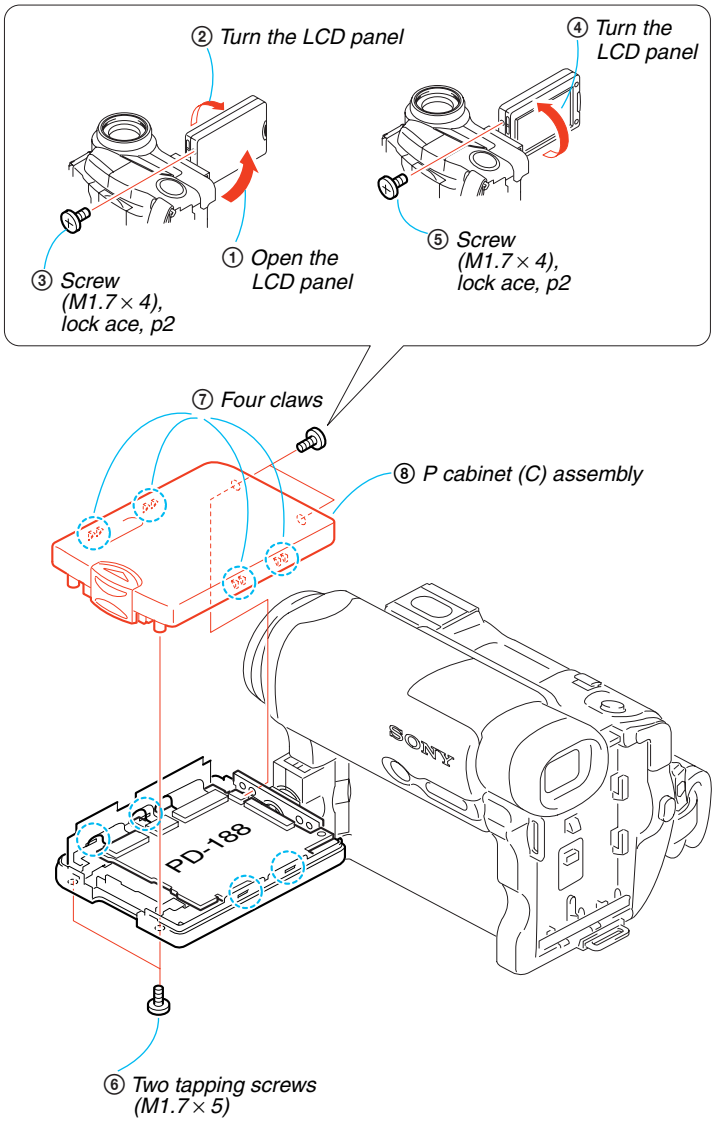
Rotation of the LCD panel has limitation due to its hinge in this model. Excessive force to rotate the LCD panel damages the hinge. Follow the precaution below.

Opening and closing of LCD panel must be performed only in the state that the LCD panel is completely in parallel (perpendicular) with the main body of the recorder.

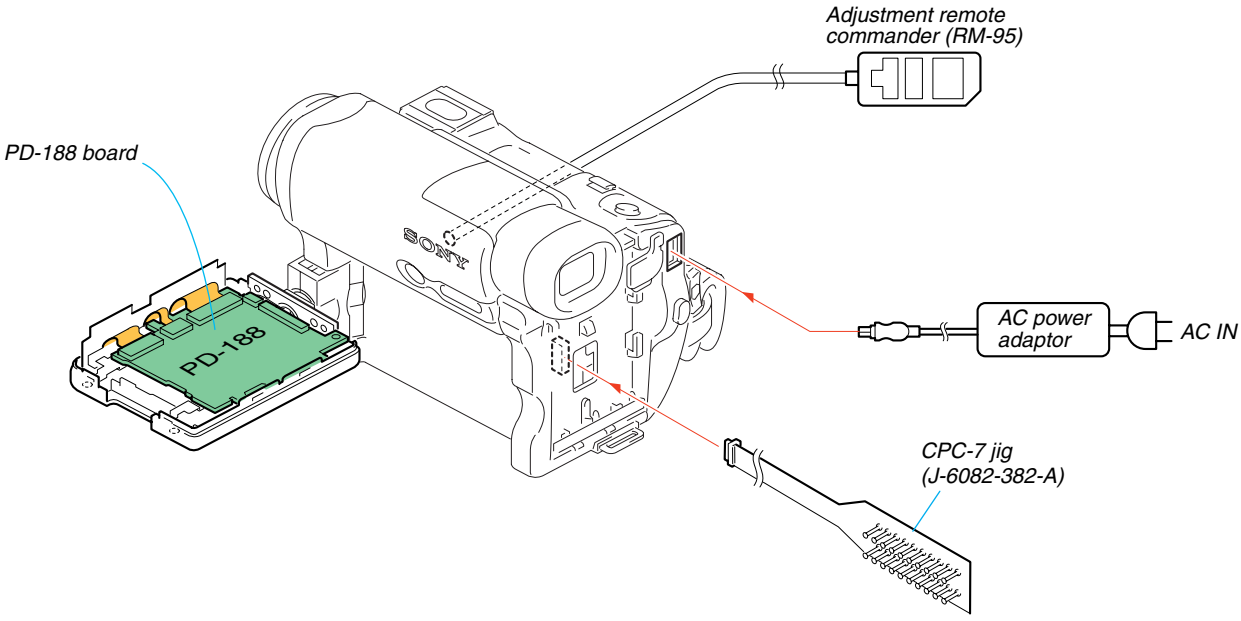


When you want to rotate the LCD panel, rotate it after the LCD panel is opened in its fully opened position.

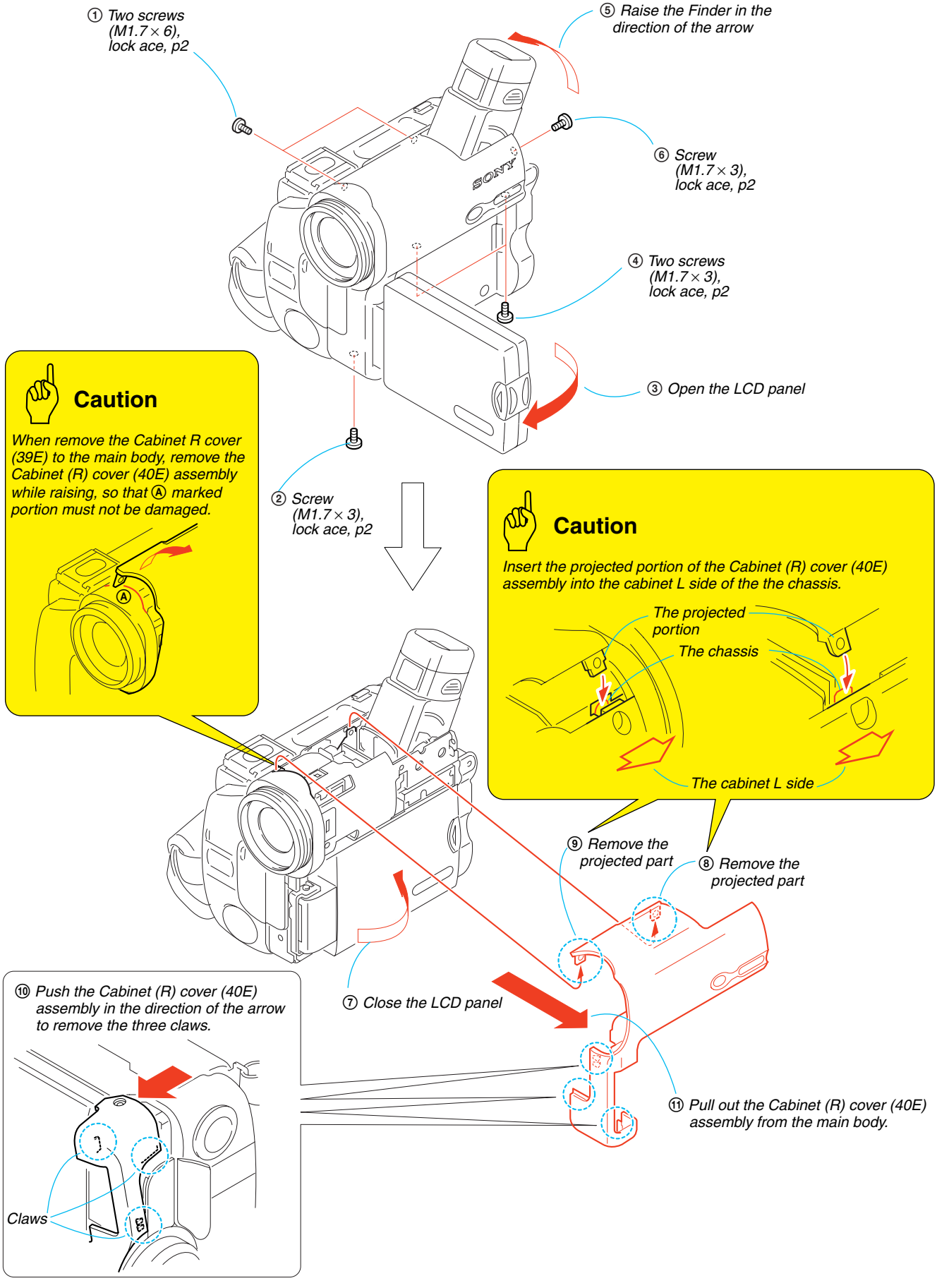



② Turn the LCD panel
④ Turn the LCD panel
① Open the LCD panel
③ Screw (M1.7 × 4), lock ace, p2
⑤ Screw (M1.7 × 4), lock ace, p2
⑦ Four claws
⑧ P cabinet (C) assembly
⑥ Two tapping screws (M1.7 × 5)
PD-188
SONY

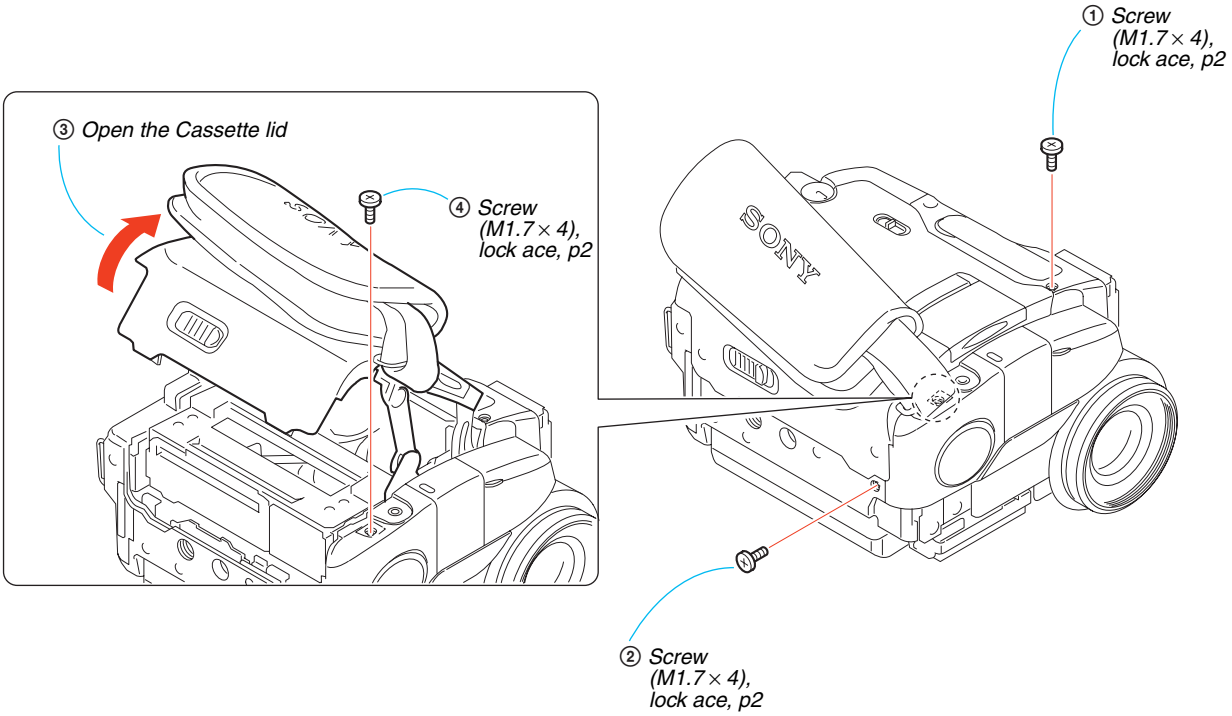
[PD-188 BOARD SERVICE POSITION]

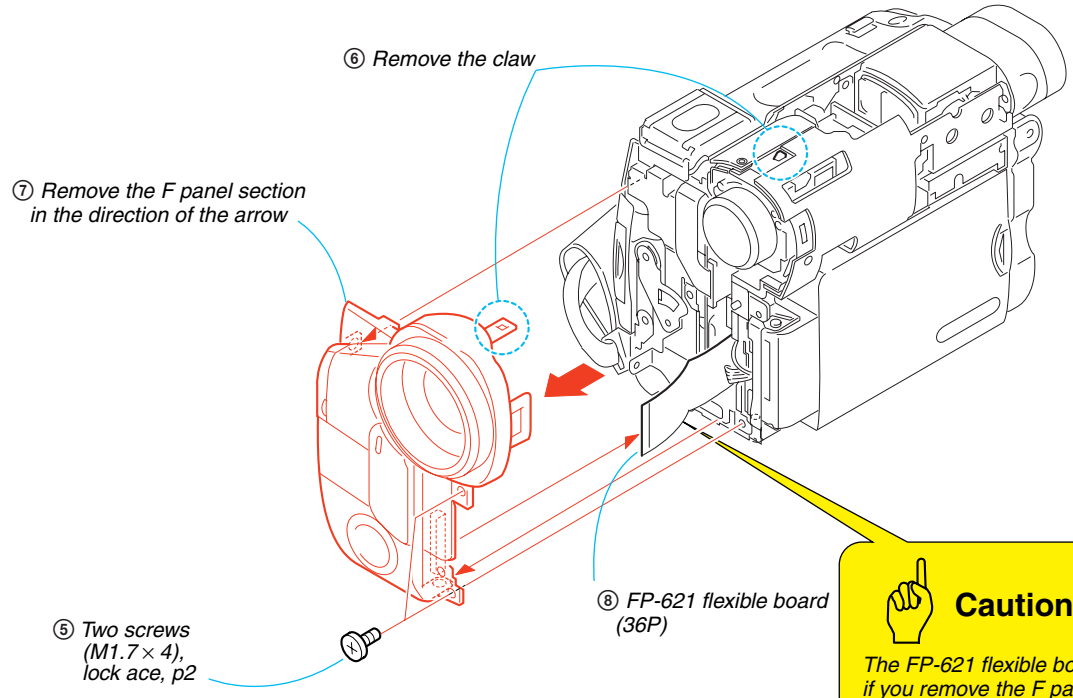


2-2. CABINET (R) COVER (40E) ASSEMBLY


① Two screws (M1.7 × 6), lock ace, p2
⑤ Raise the Finder in the direction of the arrow
⑥ Screw (M1.7 × 3), lock ace, p2
④ Two screws (M1.7 × 3), lock ace, p2
③ Open the LCD panel
② Screw (M1.7 × 3), lock ace, p2
Caution
When remove the Cabinet R cover (39E) to the main body, remove the Cabinet (R) cover (40E) assembly while raising, so that Ⓐ marked portion must not be damaged.
Caution
Insert the projected portion of the Cabinet (R) cover (40E) assembly into the cabinet L side of the the chassis.
The projected portion
The chassis
The cabinet L side
⑨ Remove the projected part
⑧ Remove the projected part
⑦ Close the LCD panel
⑩ Push the Cabinet (R) cover (40E) assembly in the direction of the arrow to remove the three claws.
Claws
⑪ Pull out the Cabinet (R) cover (40E) assembly from the main body.

2-3. F PANEL SECTION

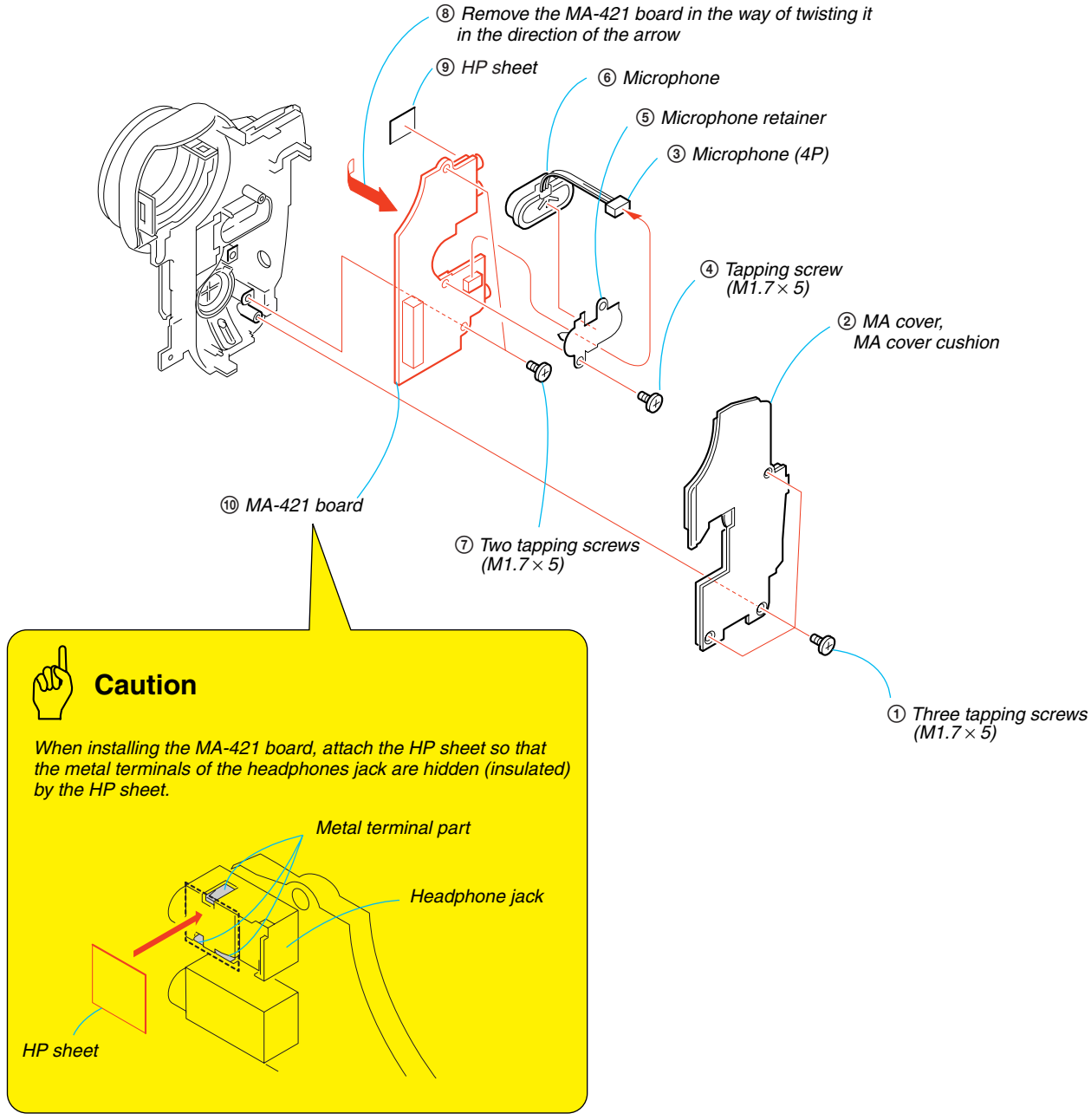



⑥ Remove the claw
⑦ Remove the F panel section in the direction of the arrow
⑤ Two screws (M1.7× 4), lock ace, p2
⑧ FP-621 flexible board (36P)

Caution

The FP-621 flexible board may be damaged if you remove the F panel section forcibly. Be very careful not to damage the flexible board.

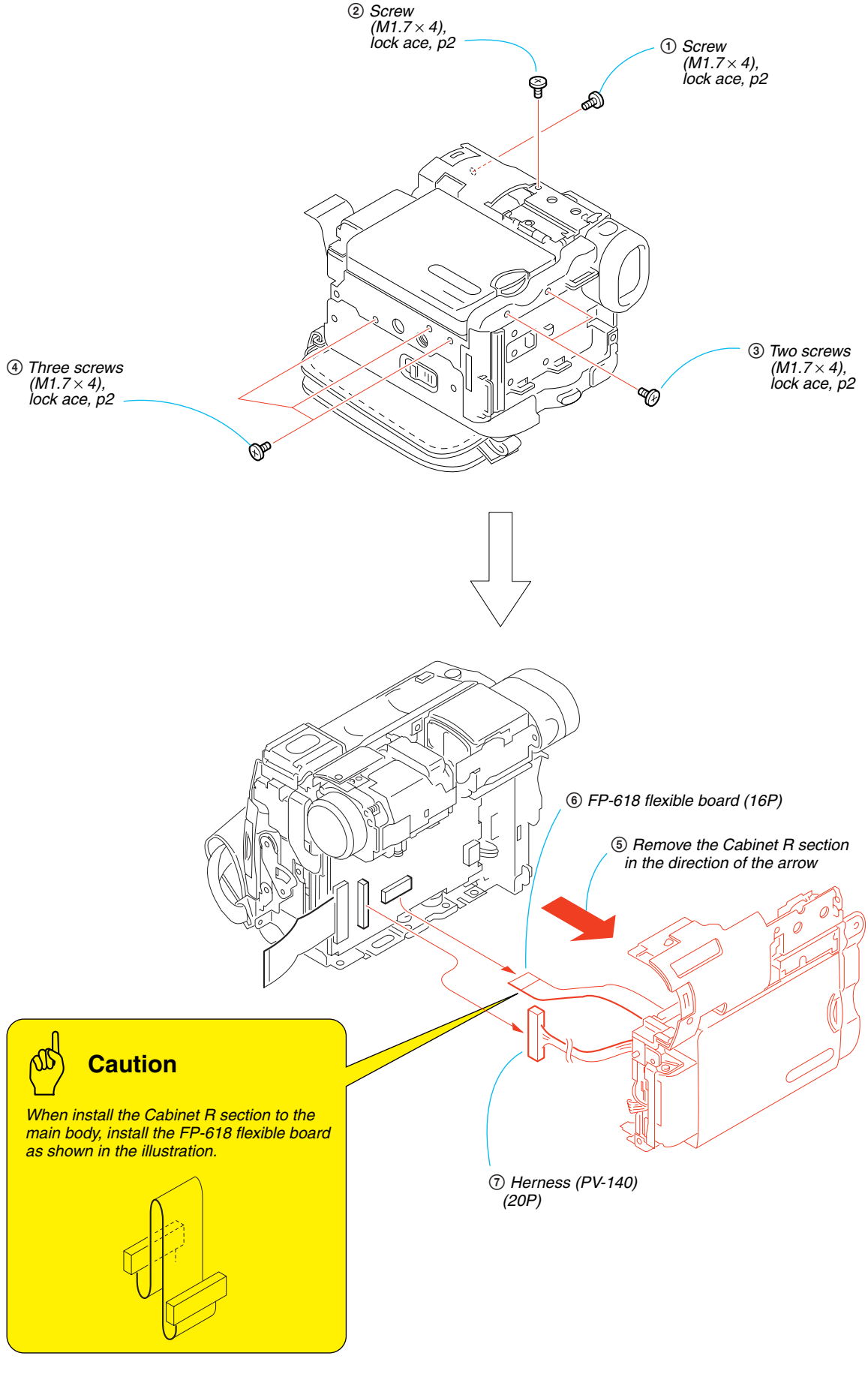
2-4. MA-421 BOARD


⑧ Remove the MA-421 board in the way of twisting it in the direction of the arrow
⑨ HP sheet
⑥ Microphone
⑤ Microphone retainer
③ Microphone (4P)
④ Tapping screw (M1.7 × 5)
② MA cover, MA cover cushion
⑩ MA-421 board
⑦ Two tapping screws (M1.7 × 5)
① Three tapping screws (M1.7 × 5)

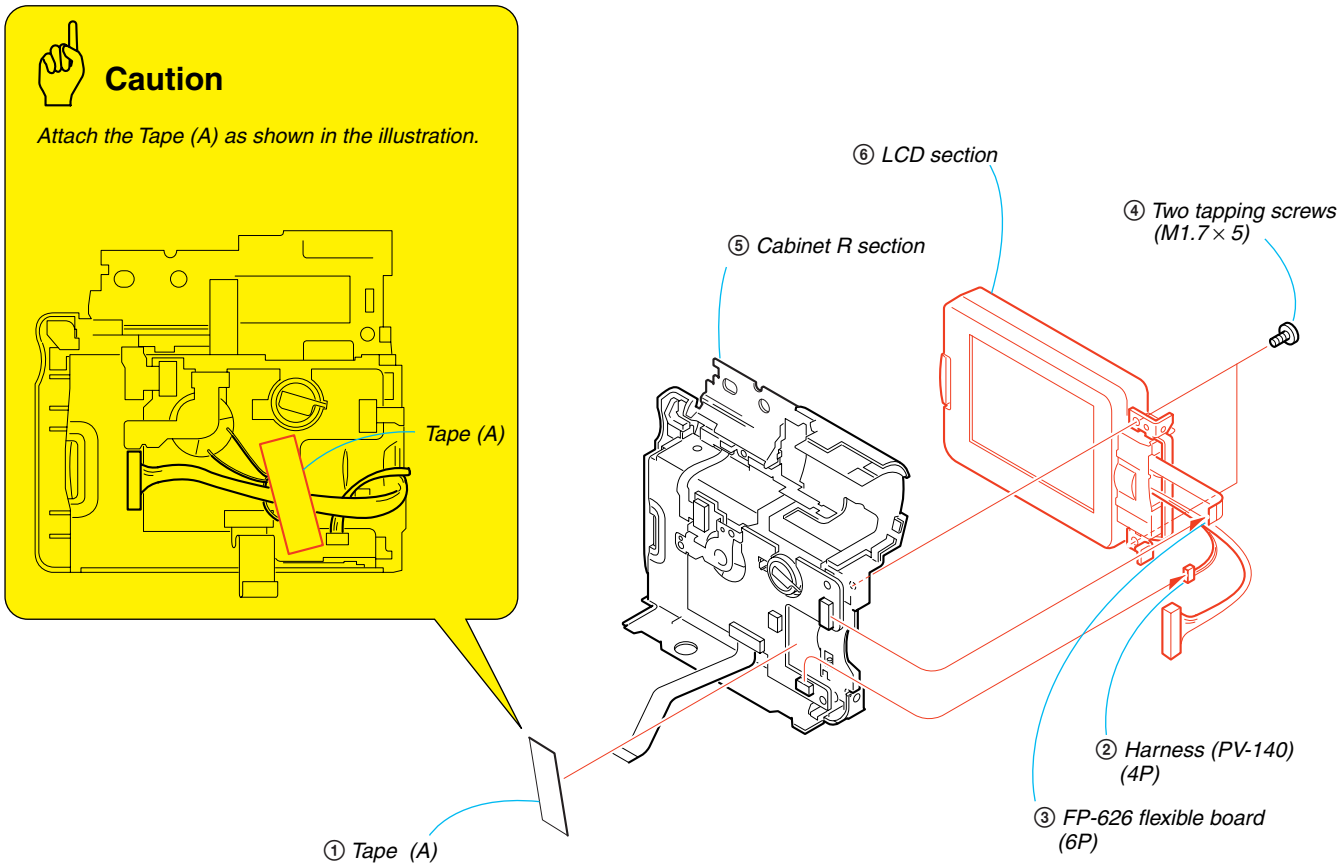
Caution

When installing the MA-421 board, attach the HP sheet so that the metal terminals of the headphones jack are hidden (insulated) by the HP sheet.

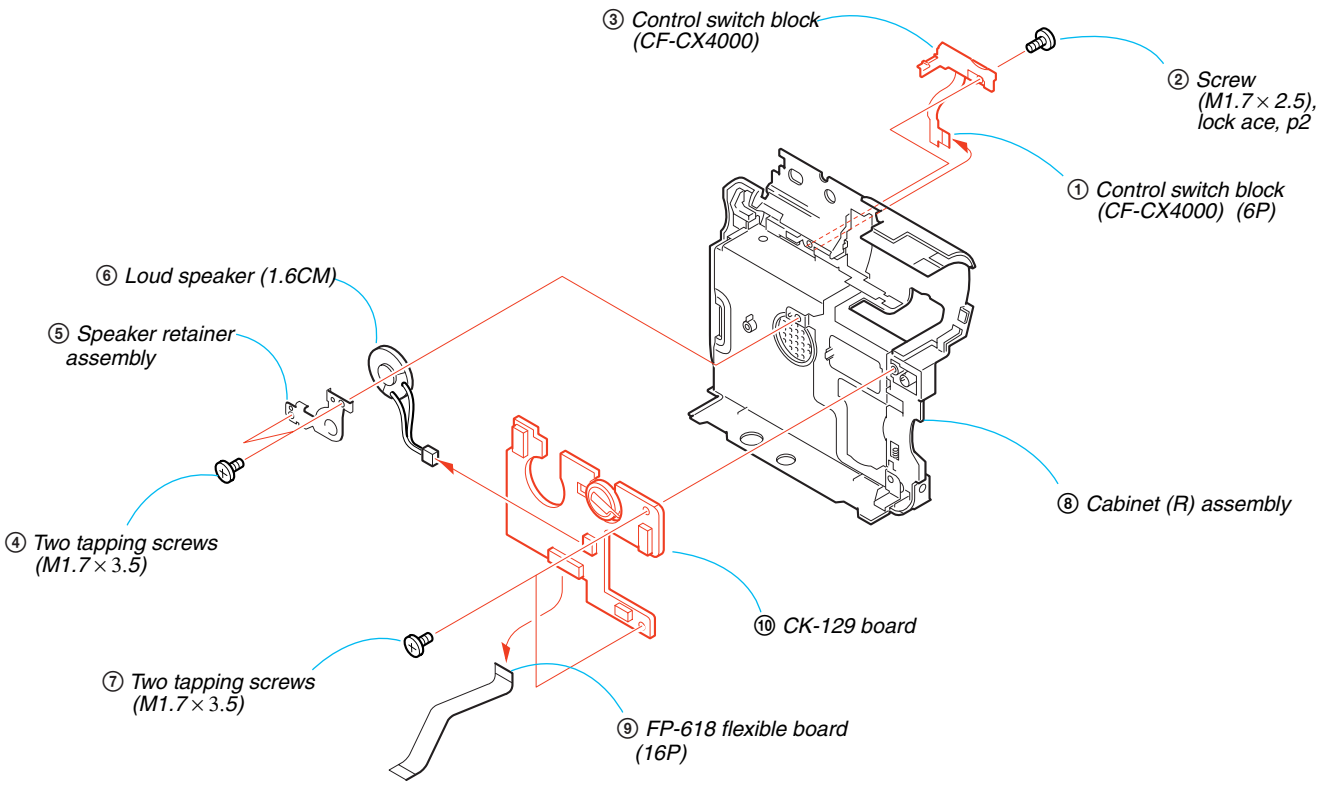
2-5. CABINET (R) SECTION


② Screw (M1.7 × 4), lock ace, p2
① Screw (M1.7 × 4), lock ace, p2
④ Three screws (M1.7 × 4), lock ace, p2
③ Two screws (M1.7 × 4), lock ace, p2
⑥ FP-618 flexible board (16P)
⑤ Remove the Cabinet R section in the direction of the arrow
⑦ Herness (PV-140) (20P)
Caution
When install the Cabinet R section to the main body, install the FP-618 flexible board as shown in the illustration.

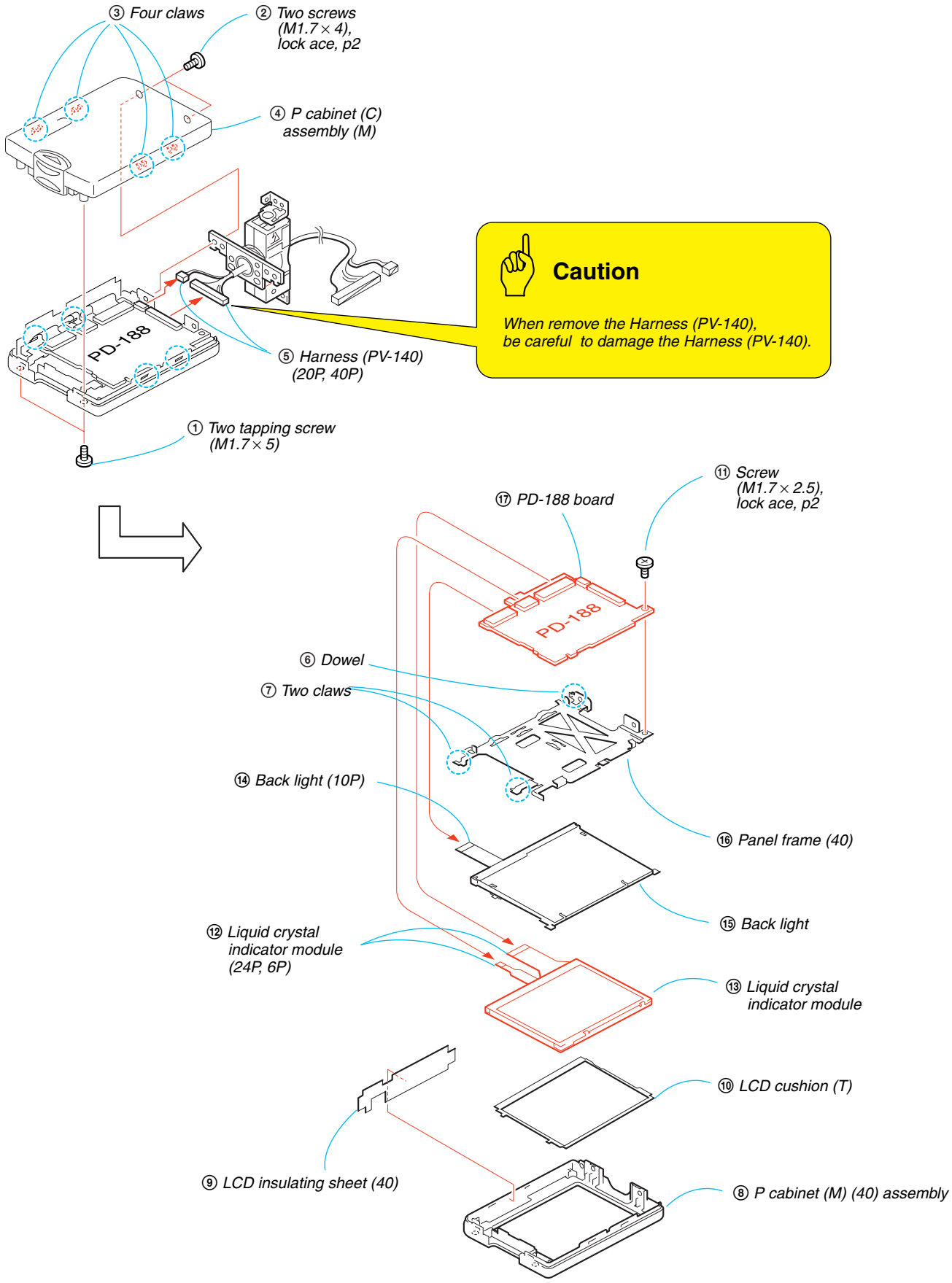
2-6. LCD SECTION


Caution
Attach the Tape (A) as shown in the illustration.
Tape (A)
⑥ LCD section
④ Two tapping screws (M1.7 × 5)
⑤ Cabinet R section
② Harness (PV-140) (4P)
③ FP-626 flexible board (6P)
① Tape (A)

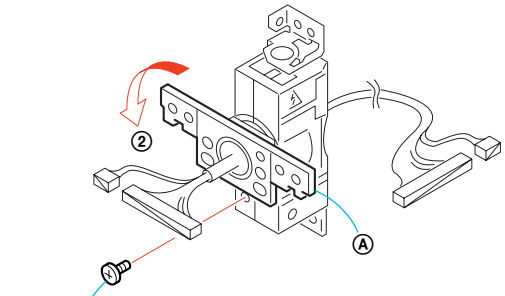
2-7. CK-129 BOARD,CONTROL SWITCH BLOCK (CF-CX4000)


③ Control switch block (CF-CX4000)
② Screw (M1.7 × 2.5), lock ace, p2
① Control switch block (CF-CX4000) (6P)
⑥ Loud speaker (1.6CM)
⑤ Speaker retainer assembly
⑧ Cabinet (R) assembly
④ Two tapping screws (M1.7 × 3.5)
⑩ CK-129 board
⑦ Two tapping screws (M1.7 × 3.5)
⑨ FP-618 flexible board (16P)

2-8. PD-188 BOARD, LCD UNIT


③ Four claws
② Two screws (M1.7 × 4), lock ace, p2
④ P cabinet (C) assembly (M)
PD-188
⑤ Harness (PV-140) (20P, 40P)
① Two tapping screw (M1.7 × 5)
Caution
When remove the Harness (PV-140), be careful to damage the Harness (PV-140).
⑰ PD-188 board
⑪ Screw (M1.7 × 2.5), lock ace, p2
⑥ Dowel
⑦ Two claws
⑭ Back light (10P)
⑯ Panel frame (40)
⑮ Back light
⑫ Liquid crystal indicator module (24P, 6P)
⑬ Liquid crystal indicator module
⑩ LCD cushion (T)
⑨ LCD insulating sheet (40)
⑧ P cabinet (M) (40) assembly

2-9. HINGE (40) ASSEMBLY



① Screw (M1.7 × 4), lock ace, p2

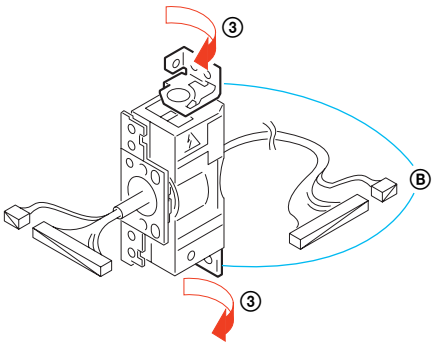
② Rotate to the "A" marked portion counterclockwise by 90 degrees

Caution

Rotation of the LCD panel has limitation due to its hinge in this model. Excessive force to rotate the LCD panel damages the hinge.
(Refer to "Caution"of 2.1 P cabinet assembly.)

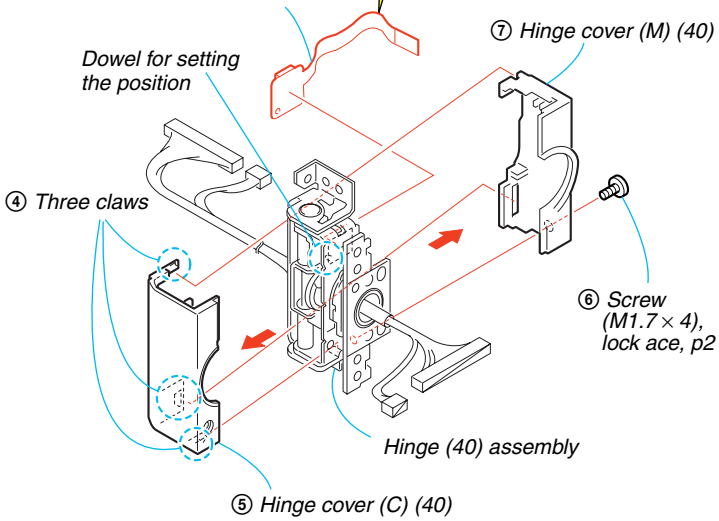
Caution

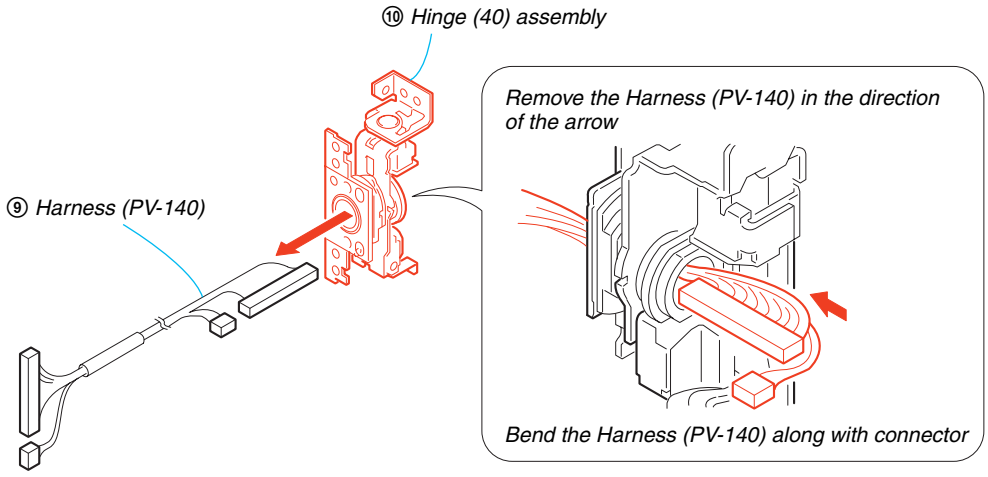
If the FP-626 flexible board is removed once, the adhesion strength of a double-sided tape decreases. Use the new FP-626 flexible board at the time of an assembly.



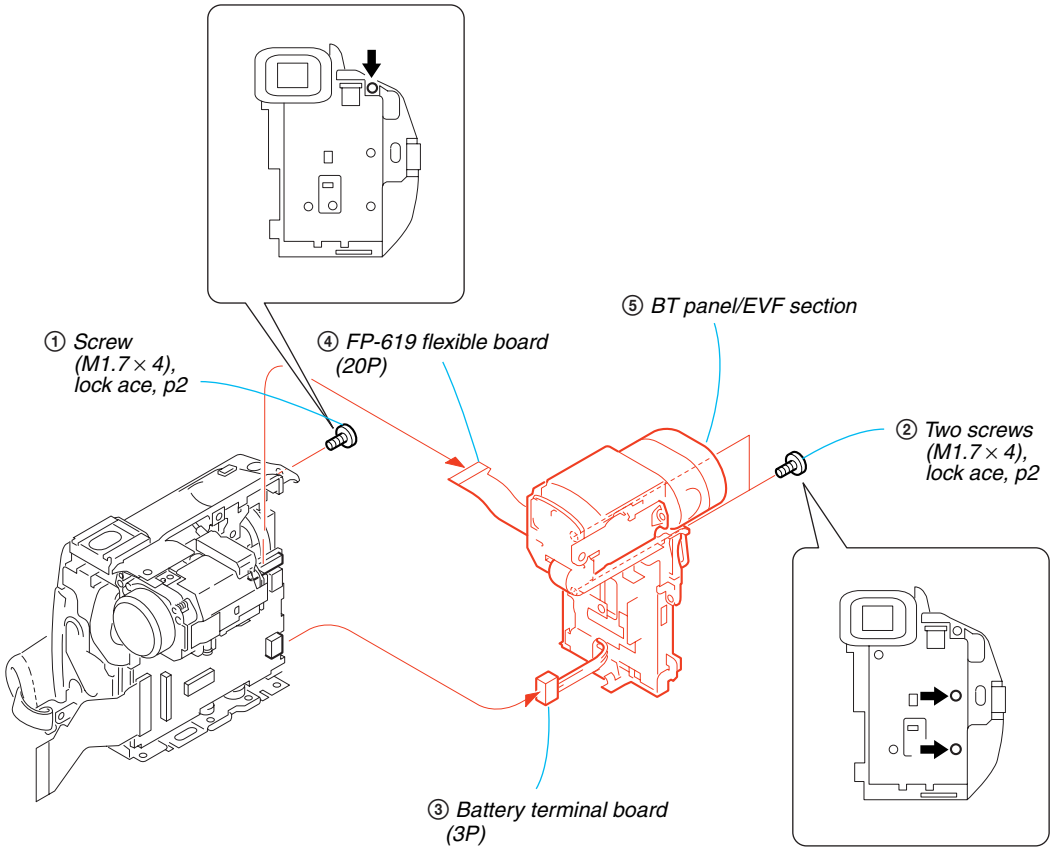
③ Rotate the "B" marked portion counterclockwise by 90 degrees in the direction of the arrow

⑧ Remove the FP-626 flexible board that is attached by the doble-sided tape

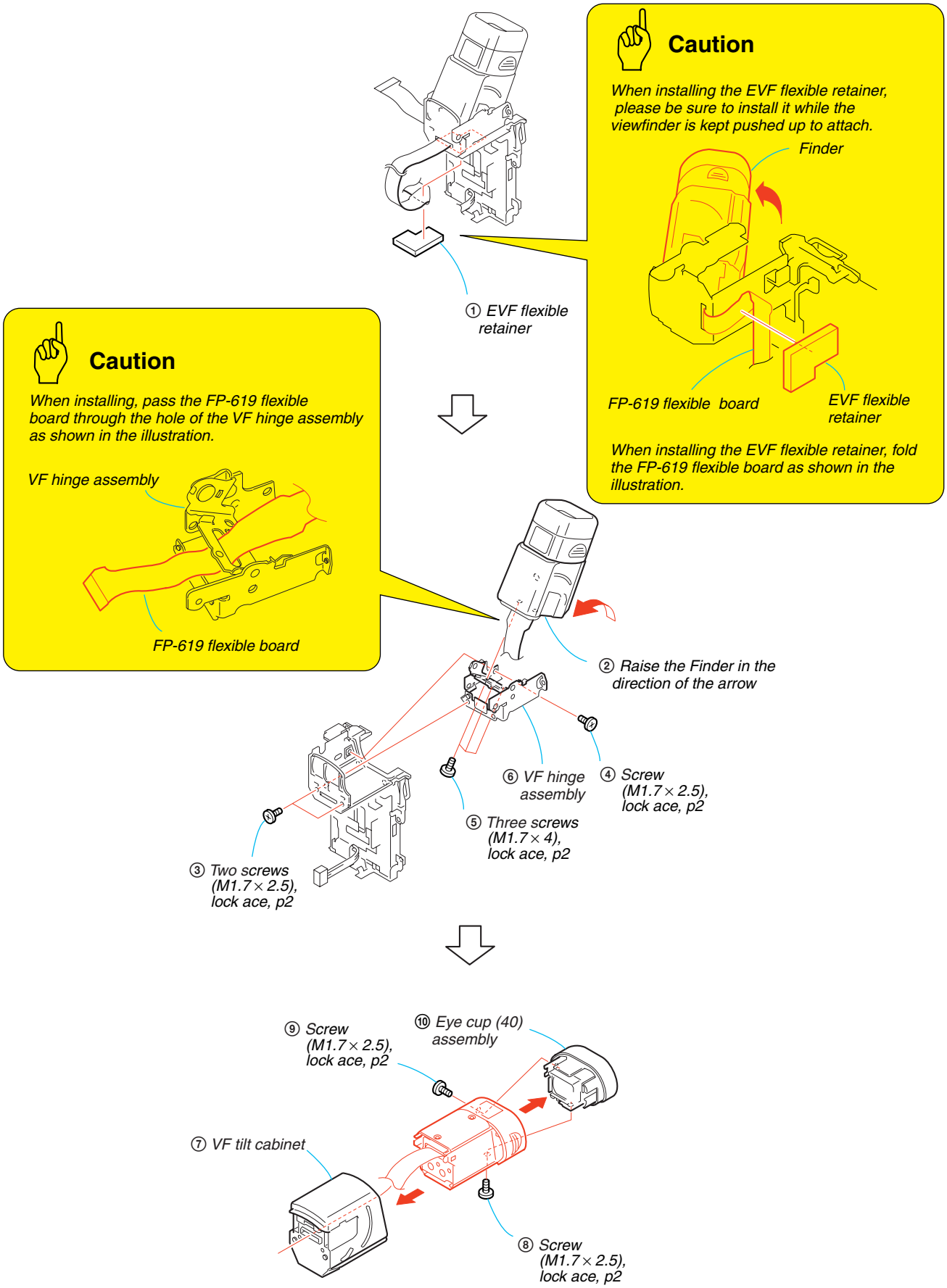



⑩ Hinge (40) assembly
⑨ Harness (PV-140)
Remove the Harness (PV-140) in the direction of the arrow
Bend the Harness (PV-140) along with connector

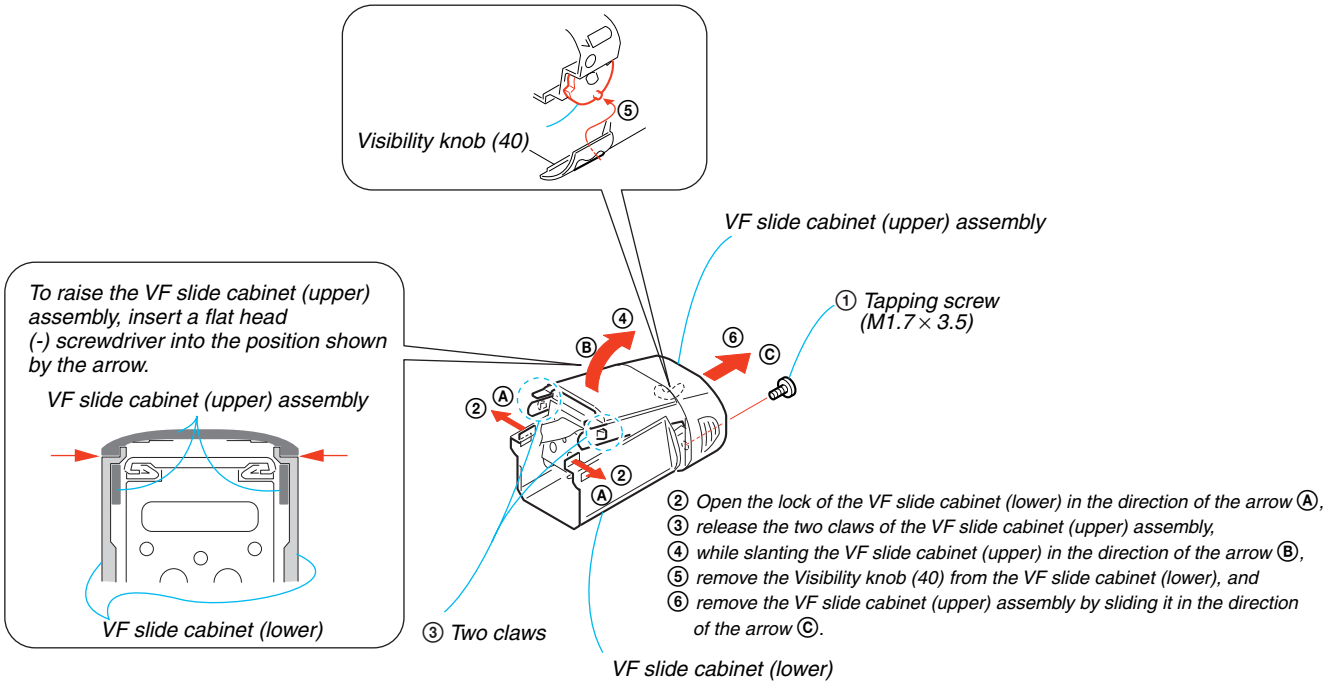
2-10. BT PANEL/EVF SECTION


⑤ BT panel/EVF section
① Screw (M1.7 × 4), lock ace, p2
④ FP-619 flexible board (20P)
② Two screws (M1.7 × 4), lock ace, p2
③ Battery terminal board (3P)

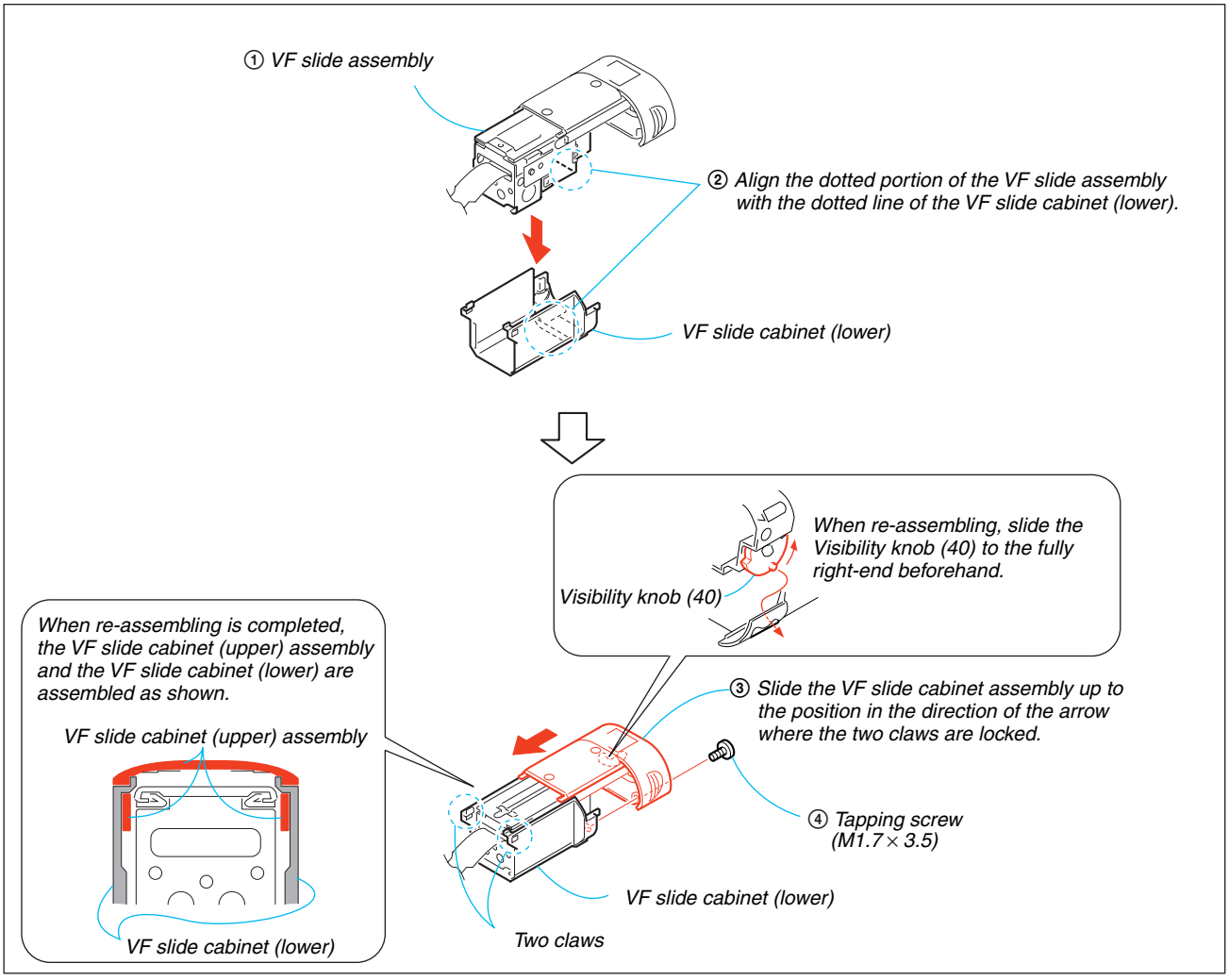
2-11. LB-085 BOARD (REMOVING OF THE EVF)- 1


Caution
When installing the EVF flexible retainer, please be sure to install it while the viewfinder is kept pushed up to attach.
Finder
FP-619 flexible board
EVF flexible retainer
When installing the EVF flexible retainer, fold the FP-619 flexible board as shown in the illustration.
① EVF flexible retainer
Caution
When installing, pass the FP-619 flexible board through the hole of the VF hinge assembly as shown in the illustration.
VF hinge assembly
FP-619 flexible board
② Raise the Finder in the direction of the arrow
③ Two screws (M1.7 × 2.5), lock ace, p2
④ Screw (M1.7 × 2.5), lock ace, p2
⑤ Three screws (M1.7 × 4), lock ace, p2
⑥ VF hinge assembly
⑦ VF tilt cabinet
⑧ Screw (M1.7 × 2.5), lock ace, p2
⑨ Screw (M1.7 × 2.5), lock ace, p2
⑩ Eye cup (40) assembly

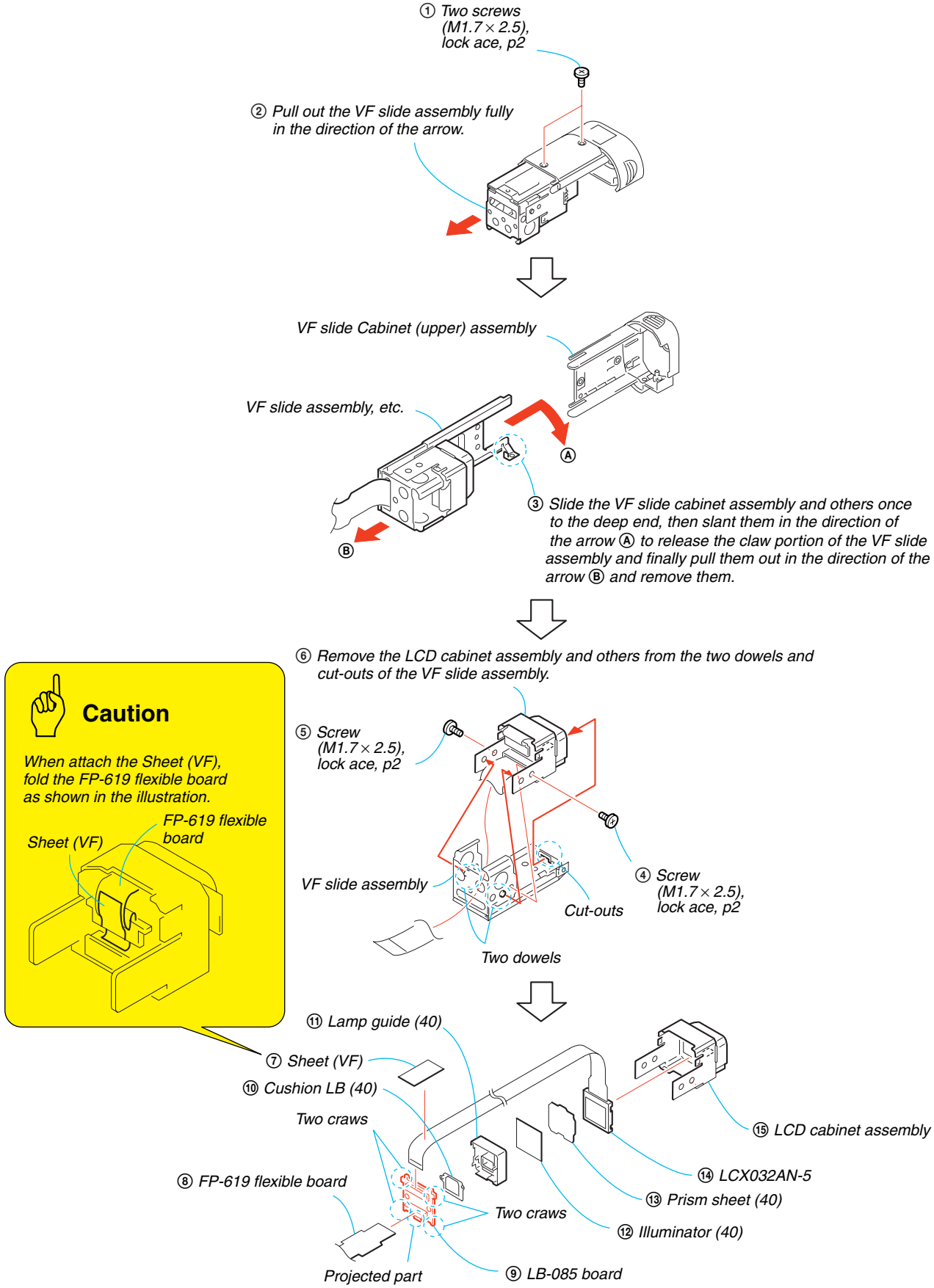
2-12. LB-085 BOARD (REMOVING OF THE EVF)- 2


Visibility knob (40)
VF slide cabinet (upper) assembly
① Tapping screw (M1.7 × 3.5)
To raise the VF slide cabinet (upper) assembly, insert a flat head (-) screwdriver into the position shown by the arrow.
VF slide cabinet (upper) assembly
VF slide cabinet (lower)
③ Two claws
② Open the lock of the VF slide cabinet (lower) in the direction of the arrow Ⓐ,
③ release the two claws of the VF slide cabinet (upper) assembly,
④ while slanting the VF slide cabinet (upper) in the direction of the arrow Ⓑ,
⑤ remove the Visibility knob (40) from the VF slide cabinet (lower), and
⑥ remove the VF slide cabinet (upper) assembly by sliding it in the direction of the arrow Ⓒ.
VF slide cabinet (lower)

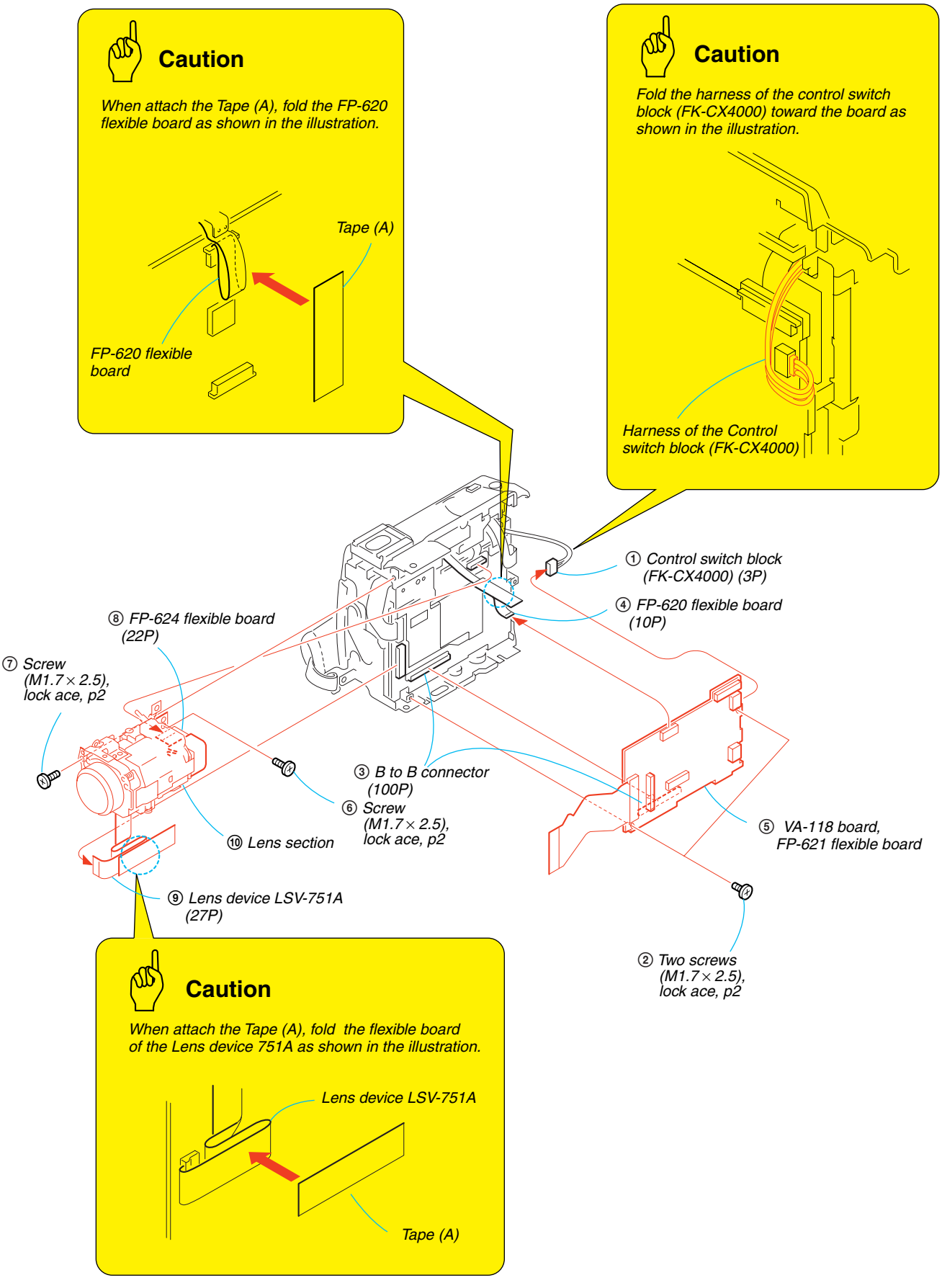
RE-ASSEMBLING THE VF SLIDE CABINET


① VF slide assembly
② Align the dotted portion of the VF slide assembly with the dotted line of the VF slide cabinet (lower).
VF slide cabinet (lower)
When re-assembling, slide the Visibility knob (40) to the fully right-end beforehand.
Visibility knob (40)
When re-assembling is completed, the VF slide cabinet (upper) assembly and the VF slide cabinet (lower) are assembled as shown.
VF slide cabinet (upper) assembly
VF slide cabinet (lower)
③ Slide the VF slide cabinet assembly up to the position in the direction of the arrow where the two claws are locked.
④ Tapping screw (M1.7 × 3.5)
VF slide cabinet (lower)
Two claws

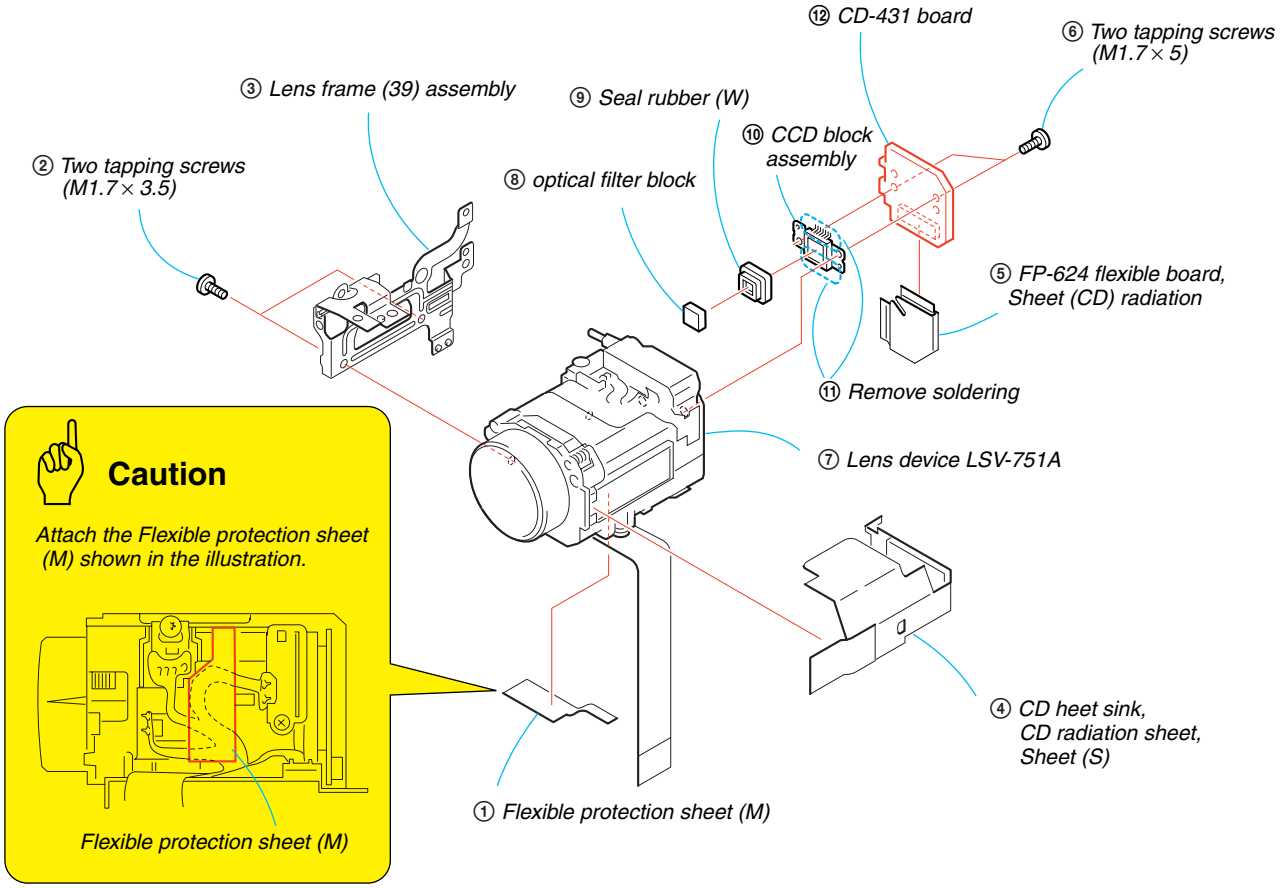
2-13. LB-085 BOARD (REMOVING OF THE EVF)- 3


① Two screws (M1.7 × 2.5), lock ace, p2
② Pull out the VF slide assembly fully in the direction of the arrow.
VF slide Cabinet (upper) assembly
VF slide assembly, etc.
Ⓐ
Ⓑ
③ Slide the VF slide cabinet assembly and others once to the deep end, then slant them in the direction of the arrow Ⓐ to release the claw portion of the VF slide assembly and finally pull them out in the direction of the arrow Ⓑ and remove them.
⑥ Remove the LCD cabinet assembly and cut-outs of the VF slide assembly.
⑤ Screw (M1.7 × 2.5), lock ace, p2
VF slide assembly
④ Screw (M1.7 × 2.5), lock ace, p2
Cut-outs
Two dowels
Caution
When attach the Sheet (VF), fold the FP-619 flexible board as shown in the illustration.
Sheet (VF)
FP-619 flexible board
⑪ Lamp guide (40)
⑦ Sheet (VF)
⑩ Cushion LB (40)
Two craws
⑧ FP-619 flexible board
Two craws
Projected part
⑨ LB-085 board
⑫ Illuminator (40)
⑬ Prism sheet (40)
⑭ LCX032AN-5
⑮ LCD cabinet assembly

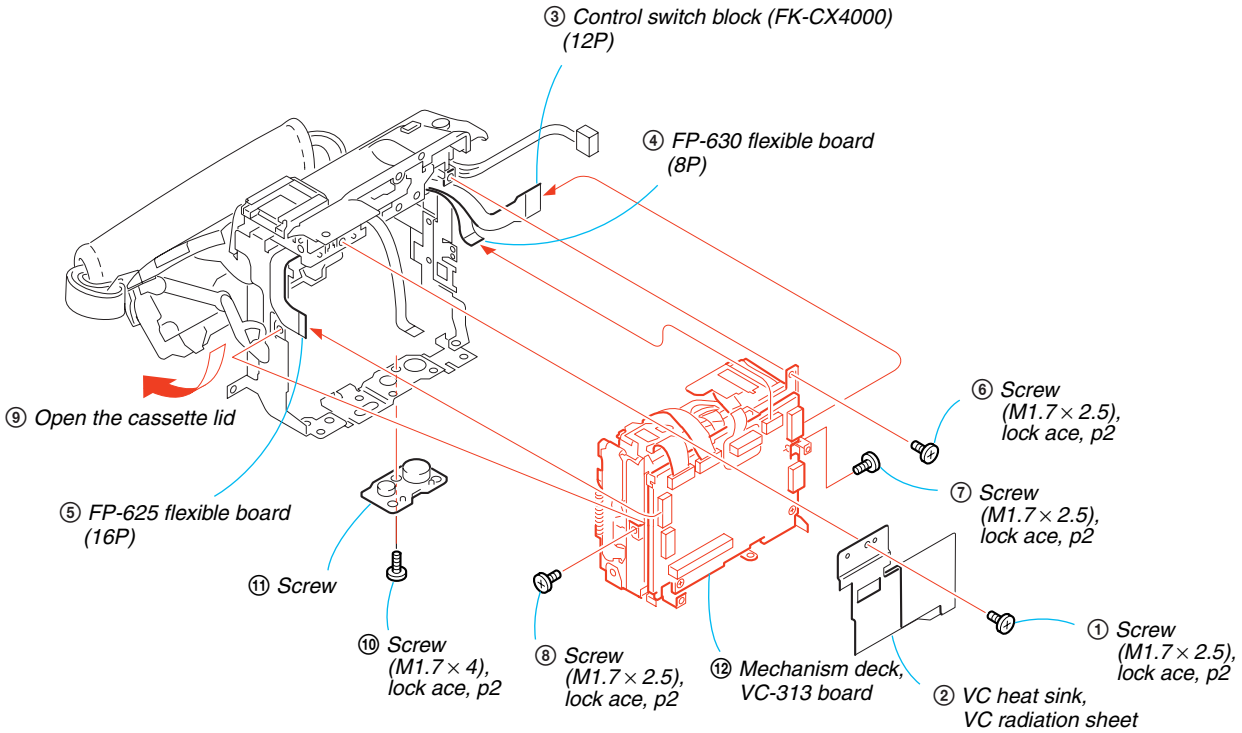
2-14. VA-118 BOARD, LENS SECTION


Caution
When attach the Tape (A), fold the FP-620 flexible board as shown in the illustration.
Tape (A)
FP-620 flexible board
Caution
Fold the harness of the control switch block (FK-CX4000) toward the board as shown in the illustration.
Harness of the Control switch block (FK-CX4000)
① Control switch block (FK-CX4000) (3P)
④ FP-620 flexible board (10P)
⑧ FP-624 flexible board (22P)
⑦ Screw (M1.7 × 2.5), lock ace, p2
③ B to B connector (100P)
⑥ Screw (M1.7 × 2.5), lock ace, p2
⑩ Lens section
⑤ VA-118 board, FP-621 flexible board
⑨ Lens device LSV-751A (27P)
② Two screws (M1.7 × 2.5), lock ace, p2
Caution
When attach the Tape (A), fold the flexible board of the Lens device 751A as shown in the illustration.
Lens device LSV-751A
Tape (A)

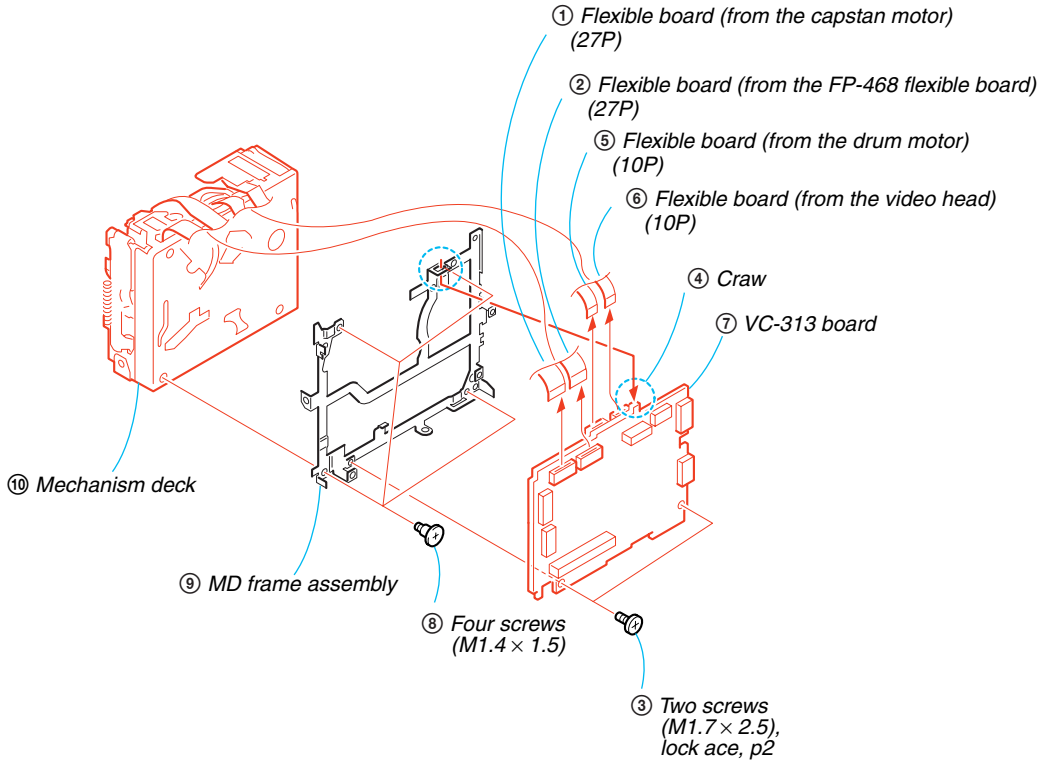
2-15. CD-431 BOARD


⑫ CD-431 board
⑥ Two tapping screws (M1.7 × 5)
③ Lens frame (39) assembly
⑨ Seal rubber (W)
⑩ CCD block assembly
② Two tapping screws (M1.7 × 3.5)
⑧ optical filter block
⑤ FP-624 flexible board, Sheet (CD) radiation
⑪ Remove soldering
⑦ Lens device LSV-751A
④ CD heet sink, CD radiation sheet, Sheet (S)
① Flexible protection sheet (M)
Caution
Attach the Flexible protection sheet (M) shown in the illustration.
Flexible protection sheet (M)

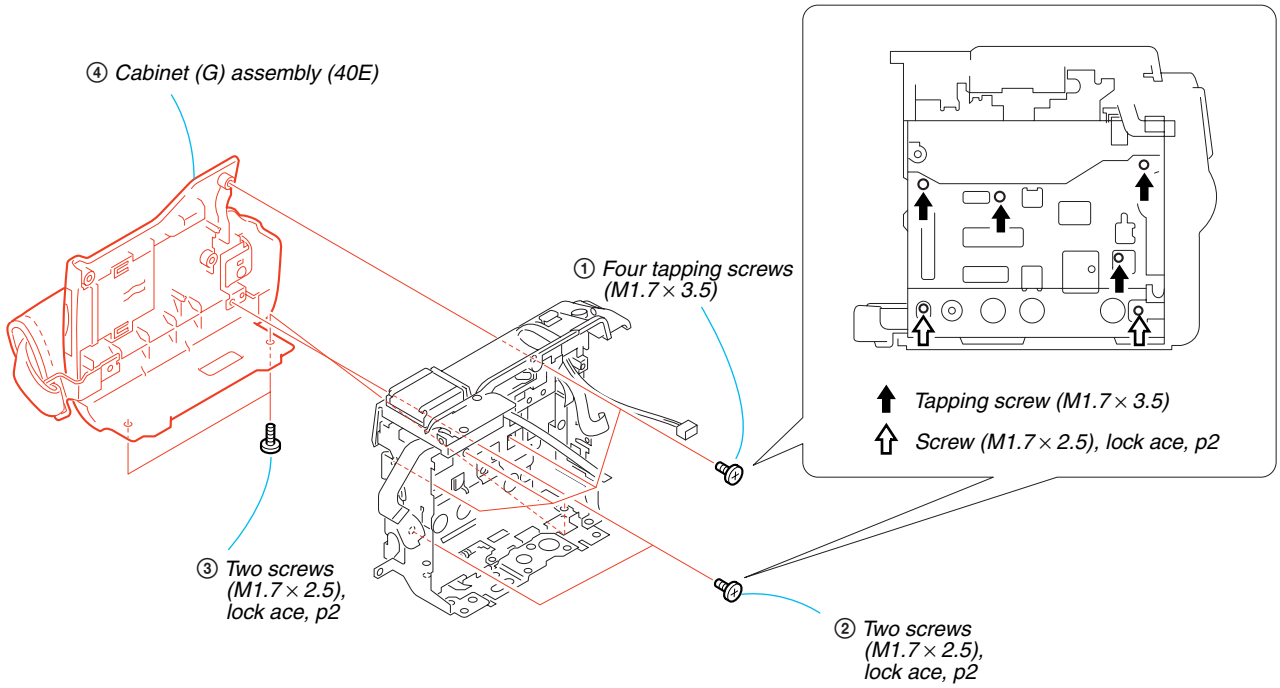
2-16. MECHANISM DECK, VC-313 BOARD (1)


③ Control switch block (FK-CX4000) (12P)
④ FP-630 flexible board (8P)
⑨ Open the cassette lid
⑥ Screw (M1.7 × 2.5), lock ace, p2
⑦ Screw (M1.7 × 2.5), lock ace, p2
⑤ FP-625 flexible board (16P)
⑪ Screw
⑩ Screw (M1.7 × 4), lock ace, p2
⑧ Screw (M1.7 × 2.5), lock ace, p2
⑫ Mechanism deck, VC-313 board
① Screw (M1.7 × 2.5), lock ace, p2
② VC heat sink, VC radiation sheet

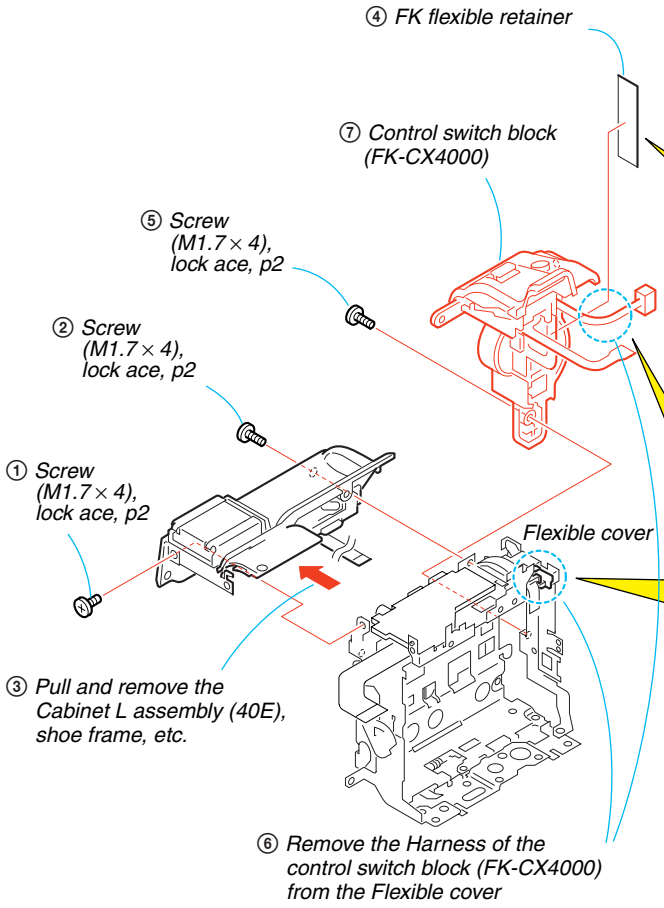
2-17. MECHANISM DECK, VC-313 BOARD (2)


① Flexible board (from the capstan motor) (27P)
② Flexible board (from the FP-468 flexible board) (27P)
⑤ Flexible board (from the drum motor) (10P)
⑥ Flexible board (from the video head) (10P)
④ Craw
⑦ VC-313 board
⑩ Mechanism deck
⑨ MD frame assembly
⑧ Four screws (M1.4 × 1.5)
③ Two screws (M1.7 × 2.5), lock ace, p2

2-18. CABINET (G) ASSEMBLY (40E)

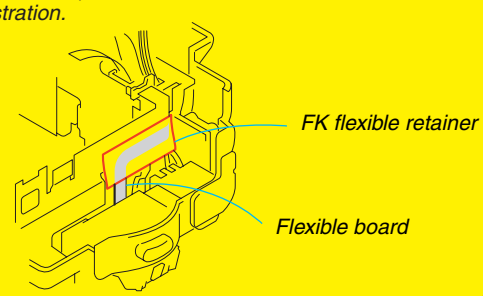

④ Cabinet (G) assembly (40E)
① Four tapping screws (M1.7 × 3.5)
③ Two screws (M1.7 × 2.5), lock ace, p2
② Two screws (M1.7 × 2.5), lock ace, p2
Tapping screw (M1.7 × 3.5)
Screw (M1.7 × 2.5), lock ace, p2

2-19. CONTROL SWITCH BLOCK (FK-CX4000)


④ FK flexible retainer
⑦ Control switch block (FK-CX4000)
⑤ Screw (M1.7 × 4), lock ace, p2
② Screw (M1.7 × 4), lock ace, p2
① Screw (M1.7 × 4), lock ace, p2
Flexible cover
③ Pull and remove the Cabinet L assembly (40E), shoe frame, etc.
⑥ Remove the Harness of the control switch block (FK-CX4000) from the Flexible cover

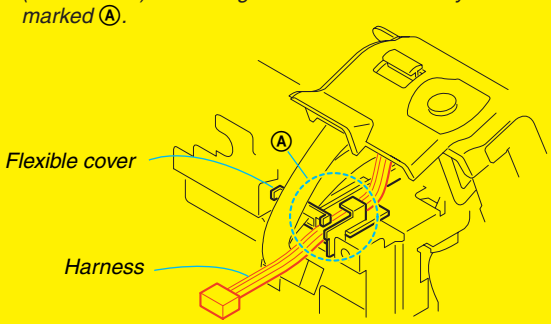
Caution

When installing, fix the flexible board of the Control switch block (FK-CX4000) with the FK flexible retainer as shown in the illustration.

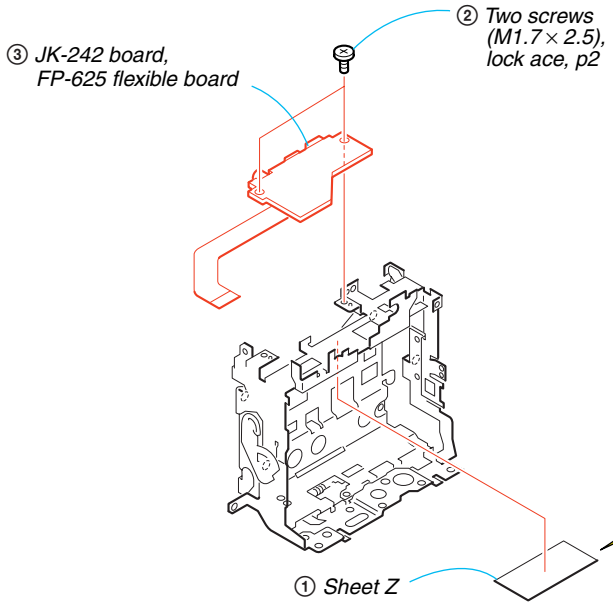


Caution

When installing, pass harness of the Control switch block (FK-CX4000) the through the Flexible cover by the marked Ⓐ.

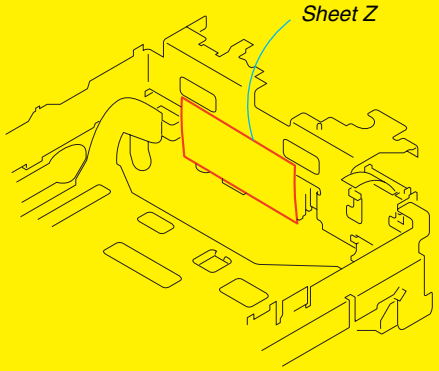


2-20. JK-242 BOARD



Caution

Install the Sheet Z as shown in the illustration.



[SERVICE POSITION TO CHECK THE VTR SECTION]

Connection to Check the VTR Section

To check the VTR section, set the VTR to the "Forced VTR power ON" mode.
Operate the VTR functions using the adjustment remote commander (with the HOLD switch set in the OFF position).

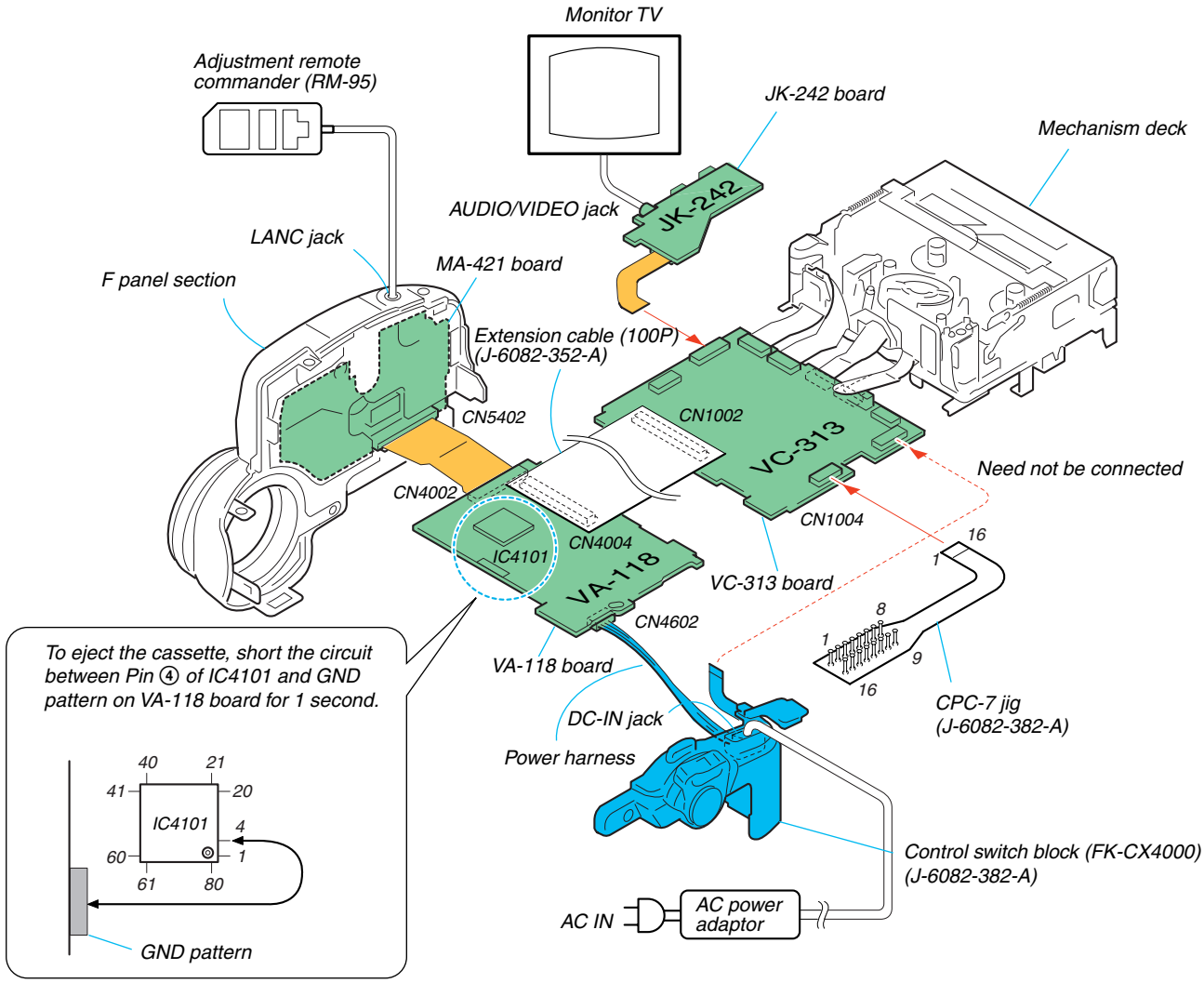
Setting the "Forced VTR Power ON" mode

1) Select page: 0, address: 01, and set data: 01.
2) Select page: 0, address: 10, and set data: 00.
3) Select page: D, address: 10, set data: 02, and press the PAUSE button of the adjustment remote commander.

Exiting the "Forced VTR Power ON" mode

1) Select page: 0, address: 01, and set data: 01.
2) Select page: 0, address: 10, and set data: 00.
3) Select page: D, address: 10, set data: 00, and press the PAUSE button of the adjustment remote commander.
4) Select page: 0, address: 01, and set data: 00.

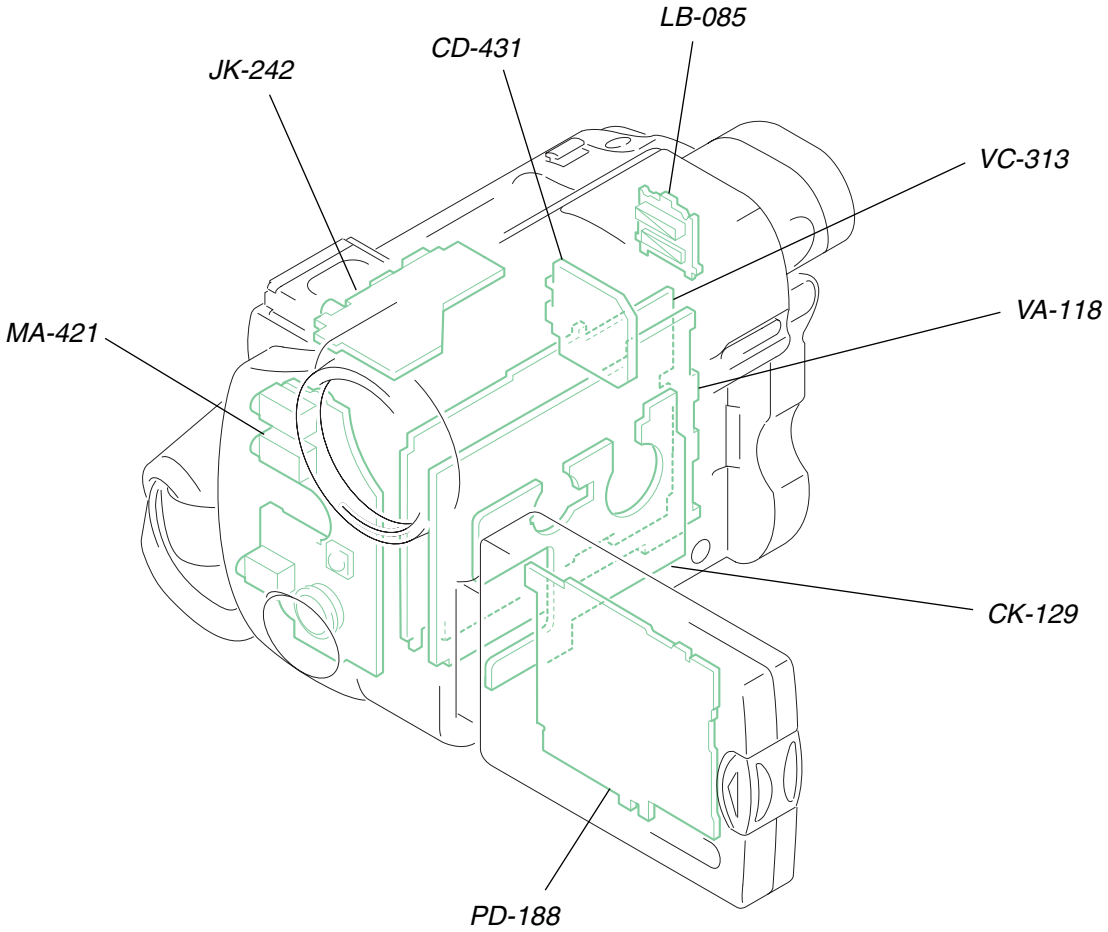
(To eject the cassette, short the circuit between Pin ④ of IC4101 and GND pattern on VA-118 board for 1 second.)



PROCEDURE OF REMOVING THE MECHANISM DECK. (VTR CHECK SERVICE POSITION)

① 2-3. CABINET (R) COVER (39E) ASSEMBLY ..... (page 2-4)
② 2-4. F PANEL SECTION ..... (page 2-5)
③ 2-6. CABINET (R) SECTION ..... (page 2-7)
④ 2-10. BT PANEL/EVF SECTION ..... (page 2-11)
⑤ 2-14. VA-118 BOARD, LENS SECTION ..... (page 2-15)
⑥ 2-16. MECHANISM DECK, VC-313 BOARD (1) .... (page 2-16)
⑦ 2-17. MECHANISM DECK, VC-313 BOARD (2) .... (page 2-17)
⑧ 2-18. CABINET (G) ASSEMBLY (40E) ..... (page 2-17)
⑨ 2-19. CONTROL SWITCH BLOCK (FK-CX4000).... (page 2-18)
⑩ 2-20. JK-242 BOARD ..... (page 2-18)

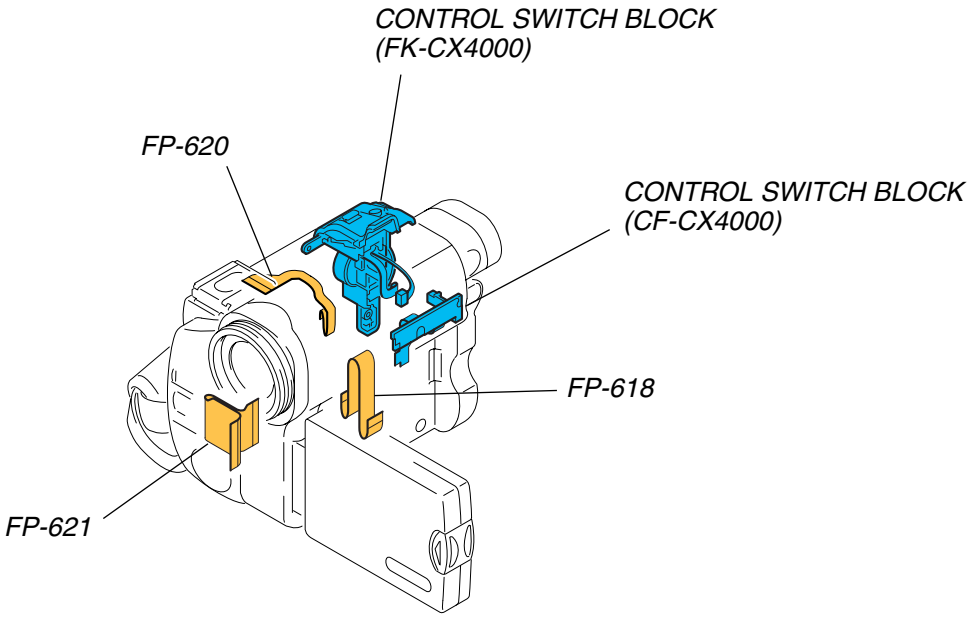
2-21. CIRCUIT BOARDS LOCATION

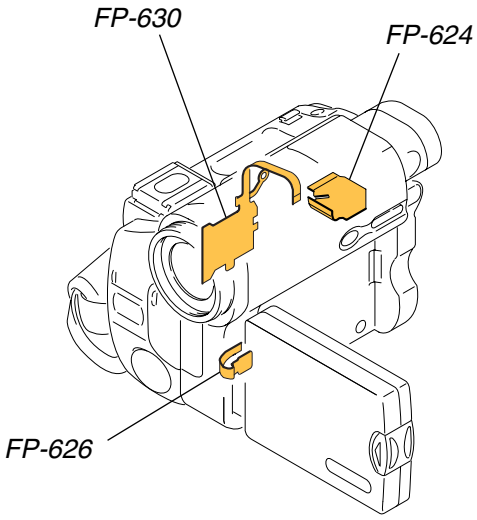


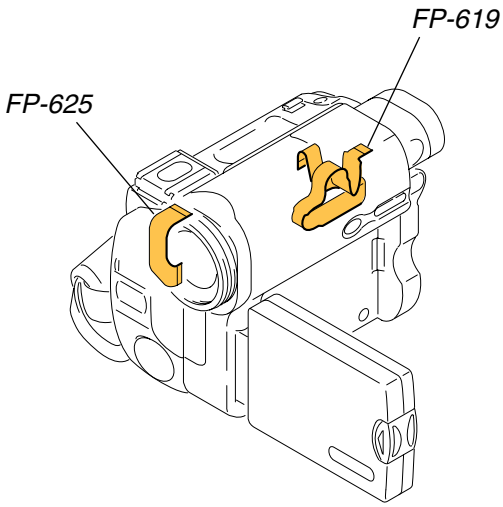
NAME	FUNCTION
CD-431	CCD IMAGER
CK-129	FUNCTION SWITCH
JK-242	RELAY
LB-085	EVF, BACKLIGHT
MA-421	MIC AMP, Y/P SENSOR, V/A IN/OUT
PD-188	RGB DRIVE, TIMING GENE, BACKLIGHT
VA-118	RGB DRIVE, HI CONTROL, Y/P SENSOR AMP, POWER IN, CHARGE, CONNECTOR
VC-313	CAMERA A/D CONV., TIMING GENERATOR, LENS DRIVE, MPEG/DV STILL PROCESSOR, SERVO, AUDIO, CAMERA/MECHA/HI CONTROL, CONNECTOR

2-22. FLEXIBLE BOARDS LOCATION

The flexible boards contained in the mechanism deck and that in the lens device are not shown.





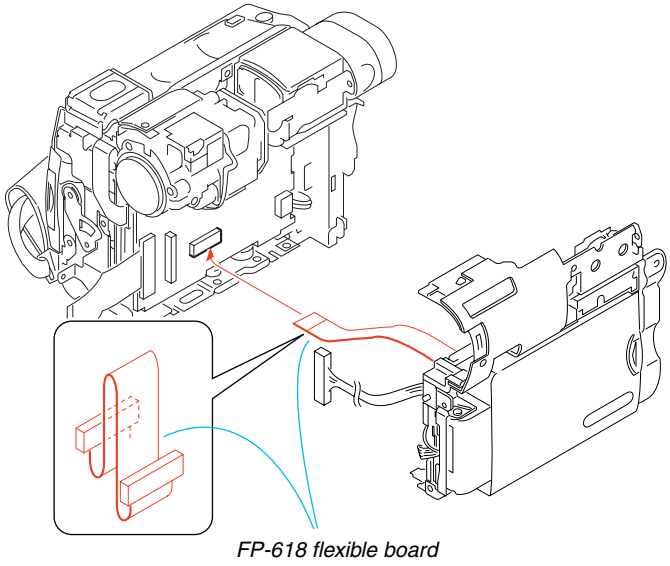


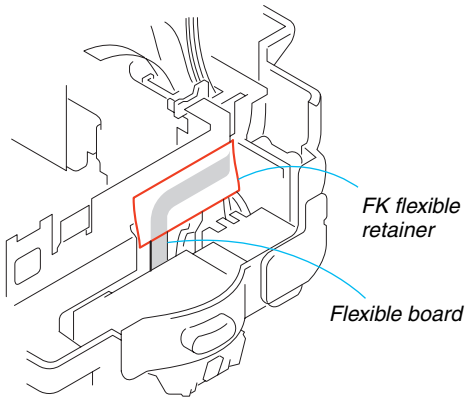
10/Feb/2003. Update

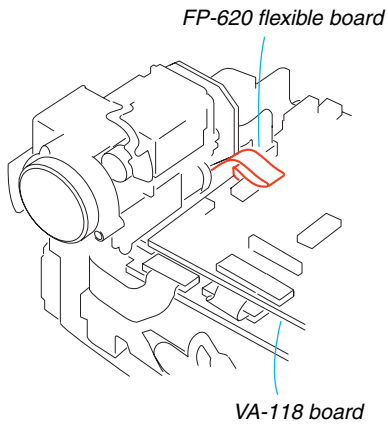
HELP

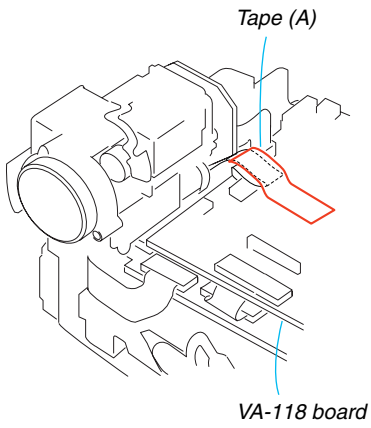
Sheet attachment positions and procedures of processing the flexible boards/harnesses are shown.

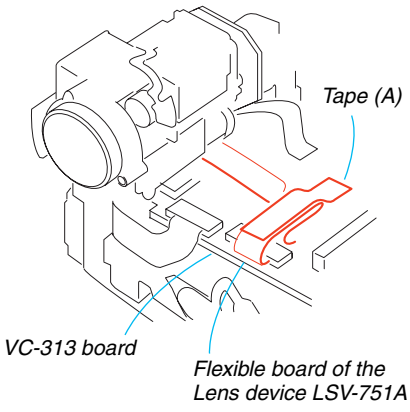
OVERALL SECTION -1

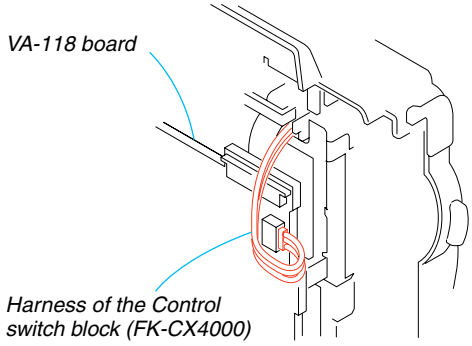


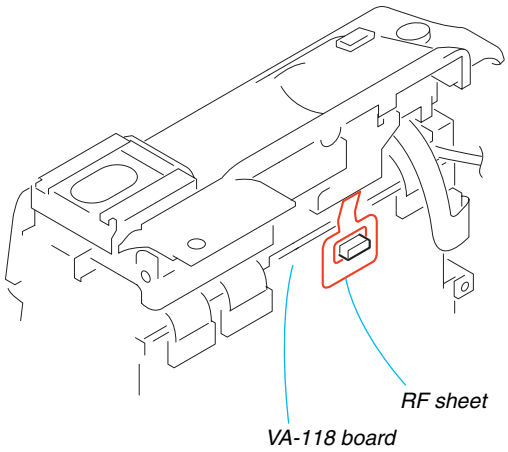




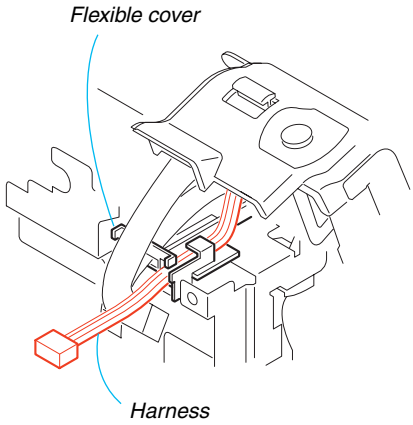




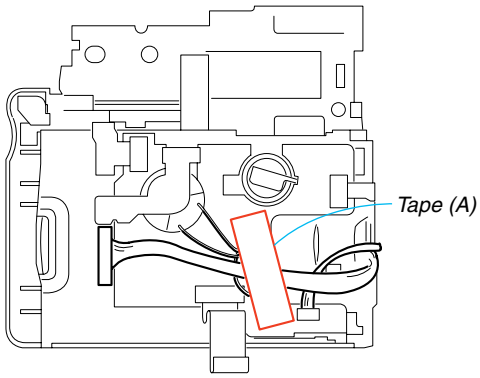




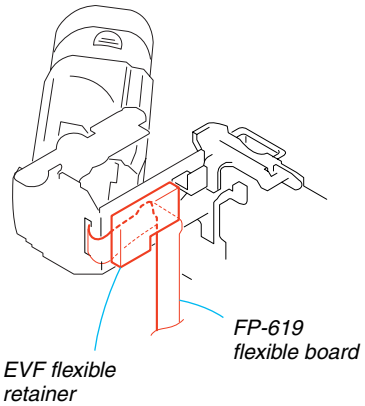
OVERALL SECTION -2

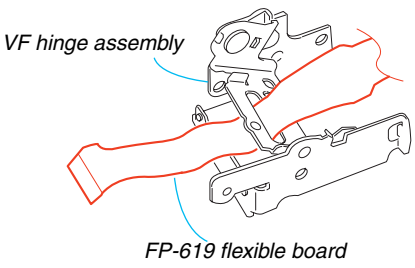


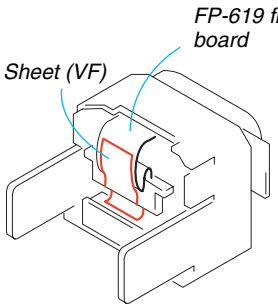
CABINET R SECTION

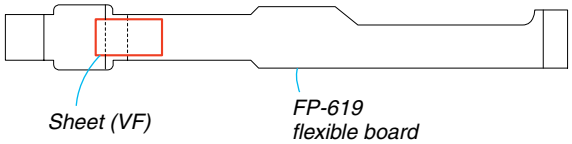


BT PANEL/EVF SECTION



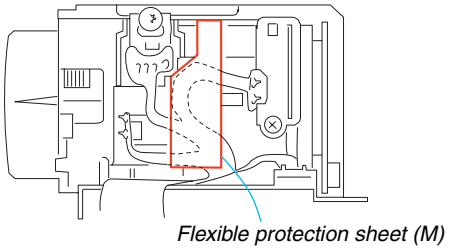




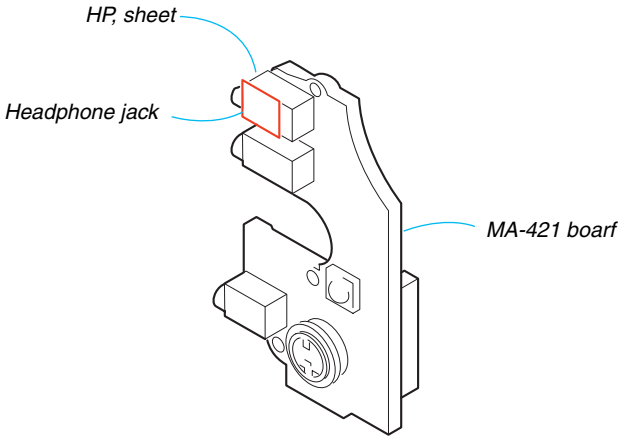


HELP

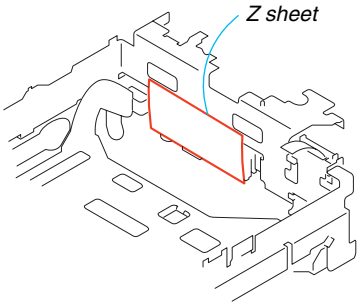
LENS SECTION



F PANEL SECTION



CABINET L SECTION



COVER

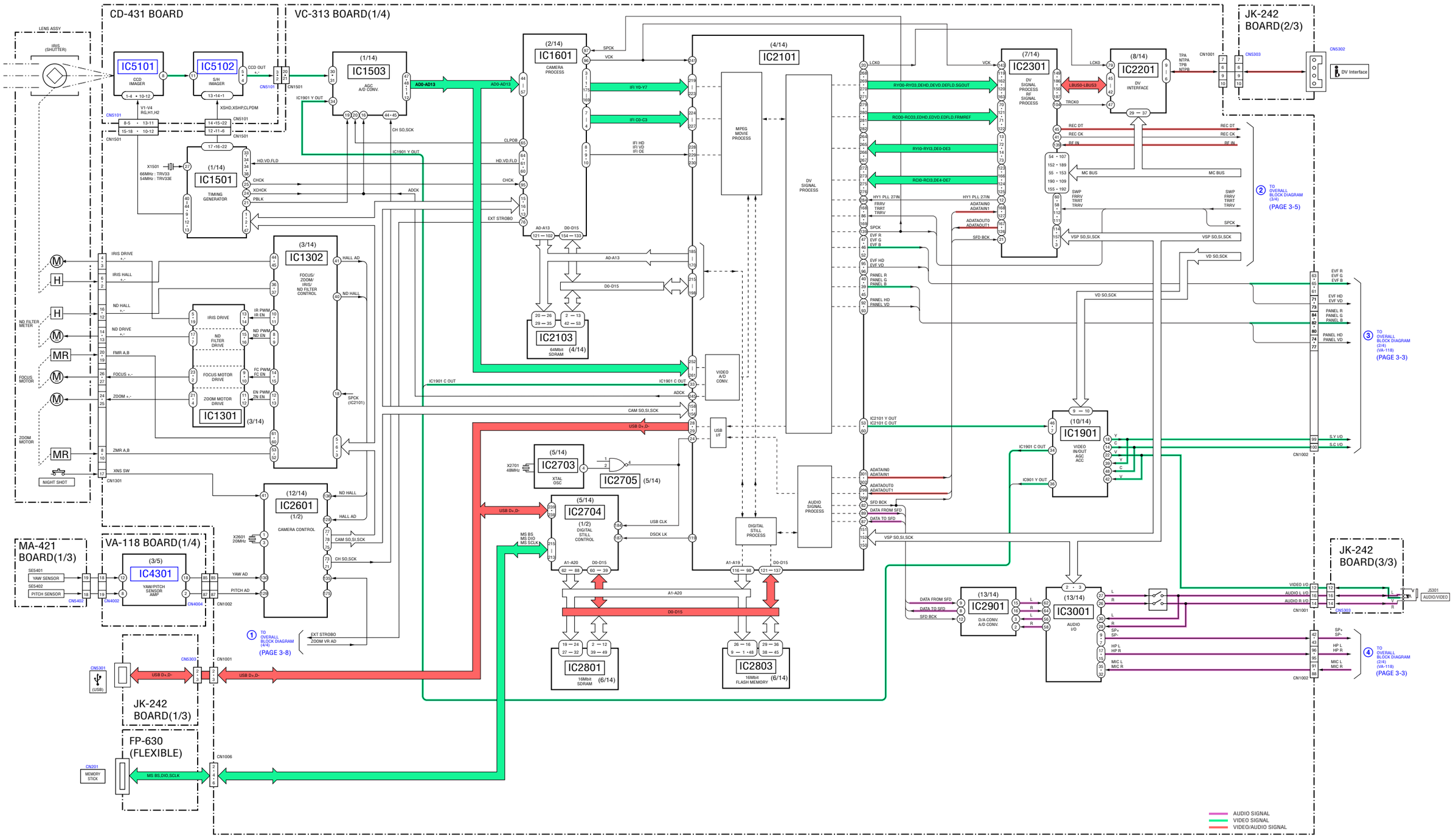
3. BLOCK DIAGRAMS

Link

OVERALL BLOCK DIAGRAM (1/4)	POWER BLOCK DIAGRAM (1/2)
OVERALL BLOCK DIAGRAM (2/4)	POWER BLOCK DIAGRAM (2/2)
OVERALL BLOCK DIAGRAM (3/4)	
OVERALL BLOCK DIAGRAM (4/4)	

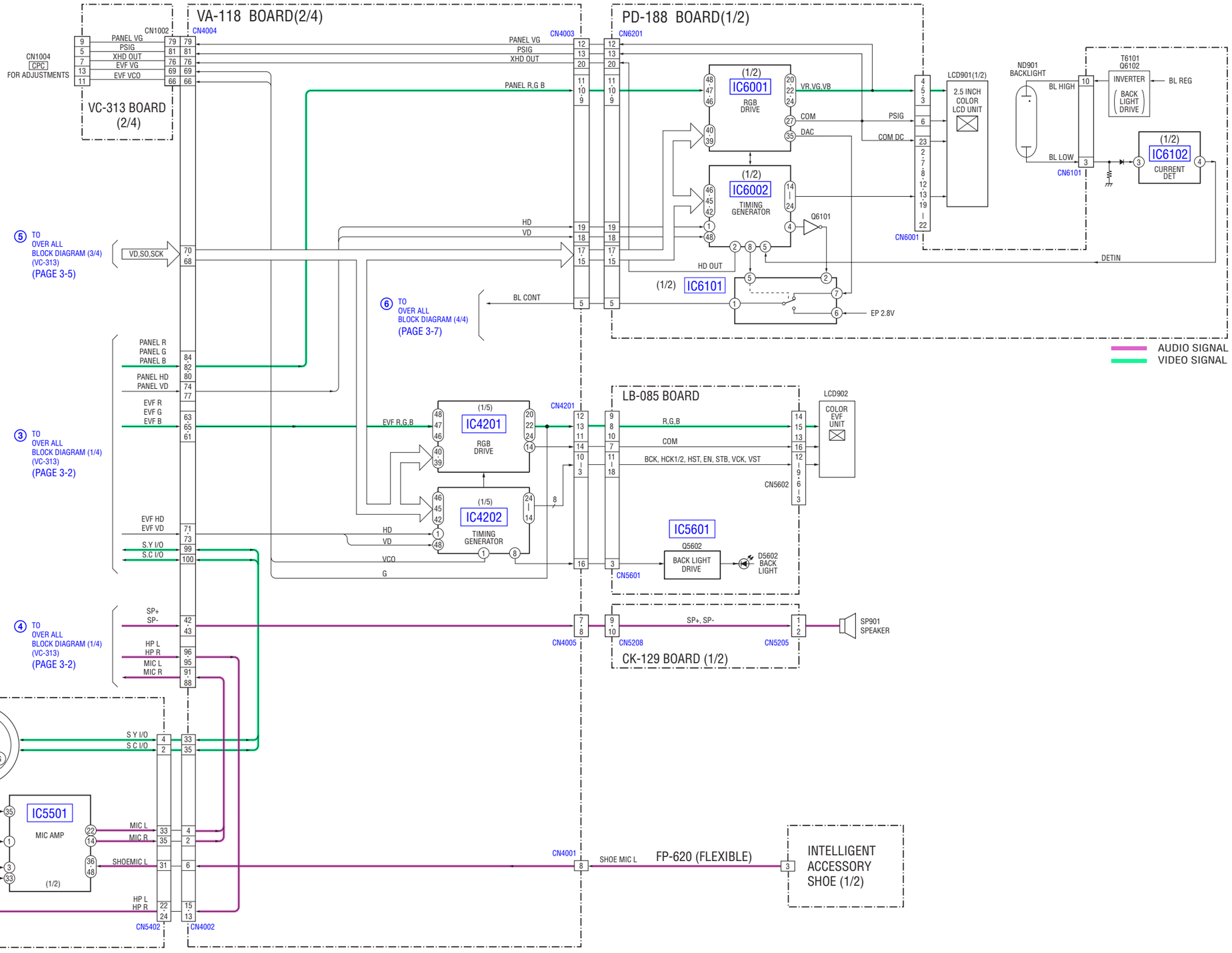
3-1. OVERALL BLOCK DIAGRAM (1/4)

( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



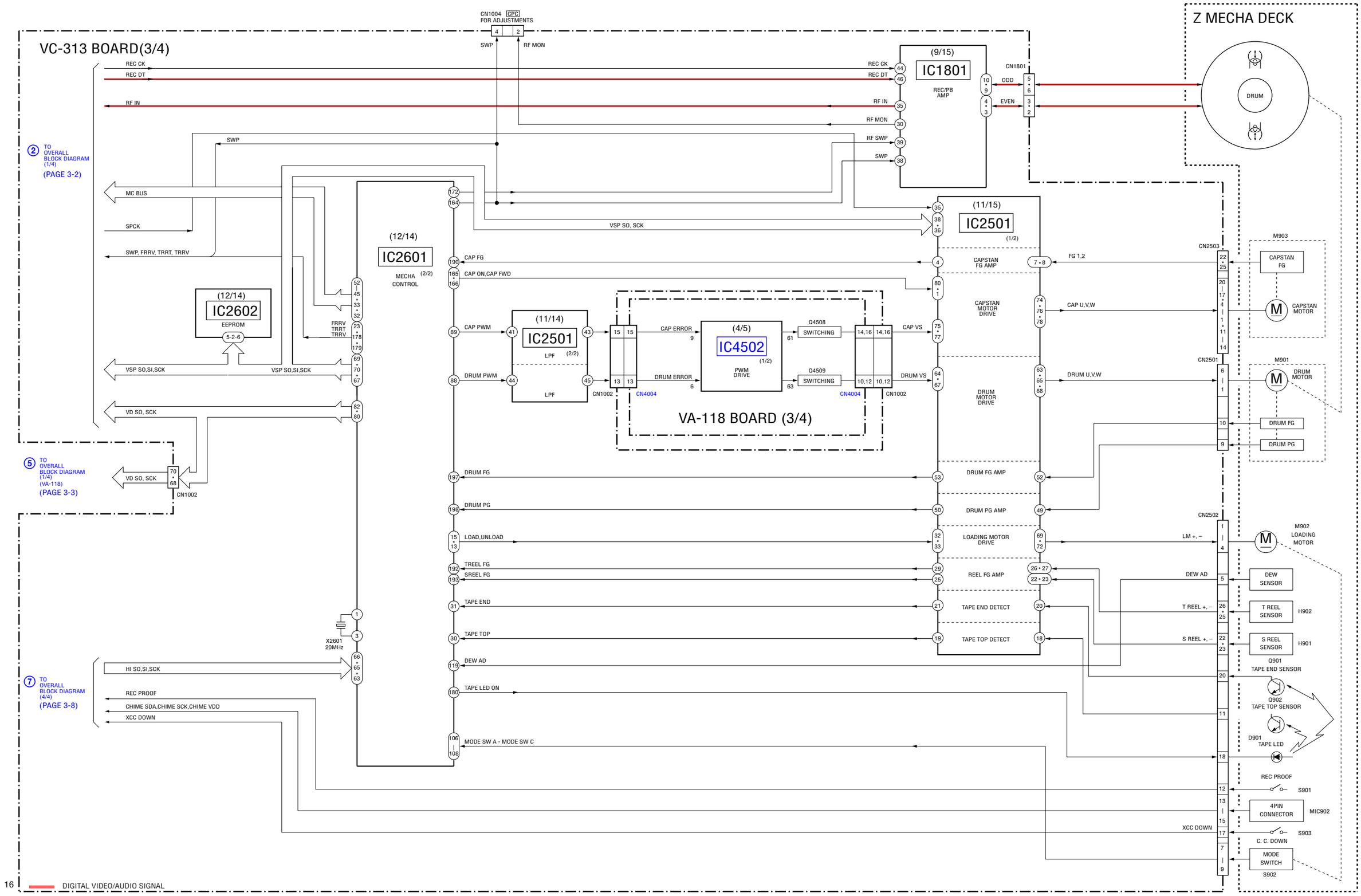
3-2. OVERALL BLOCK DIAGRAM (2/4)

( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



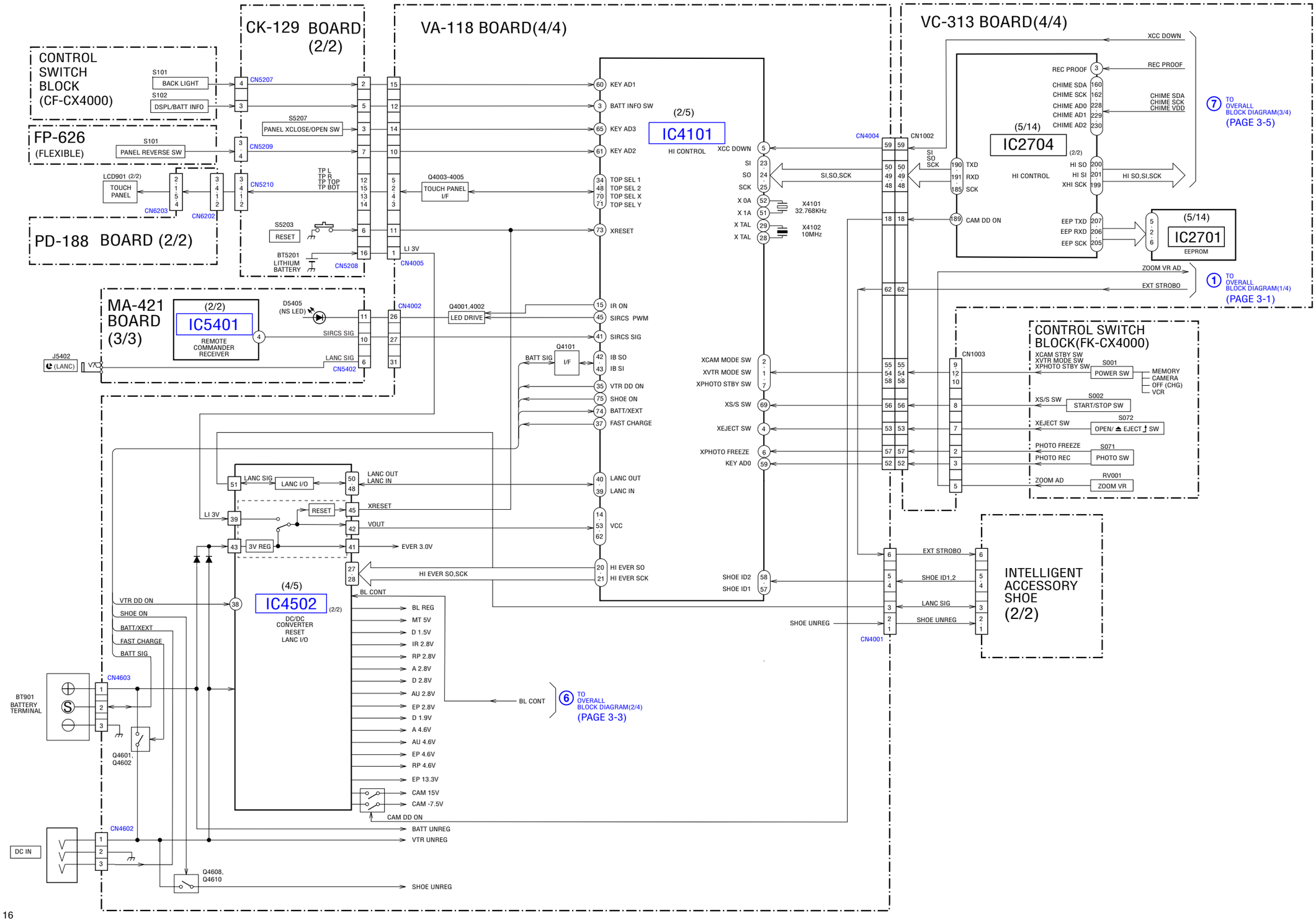
3-3. OVERALL BLOCK DIAGRAM (3/4)

( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



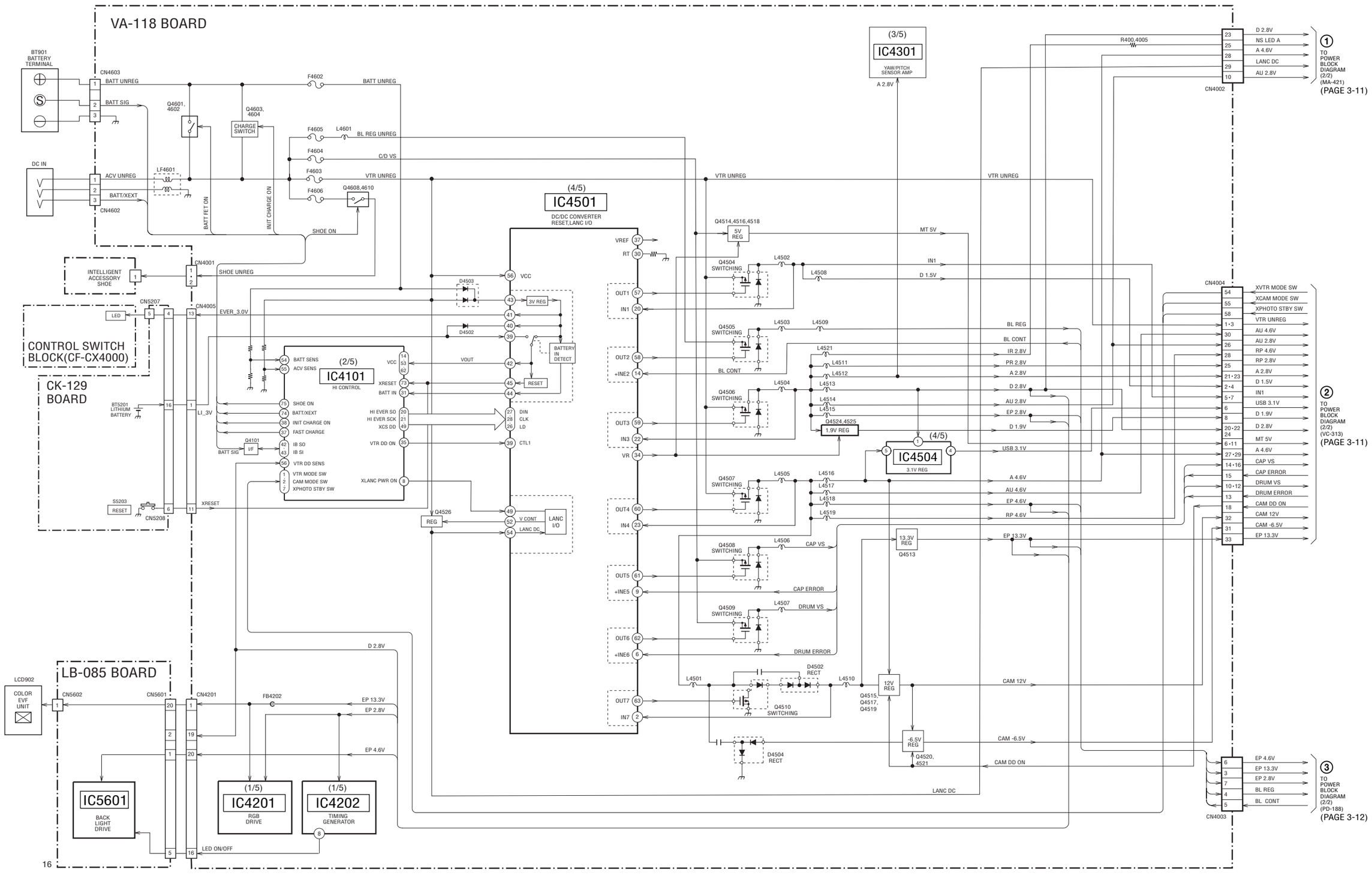
3-4. OVERALL BLOCK DIAGRAM (4/4)

( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



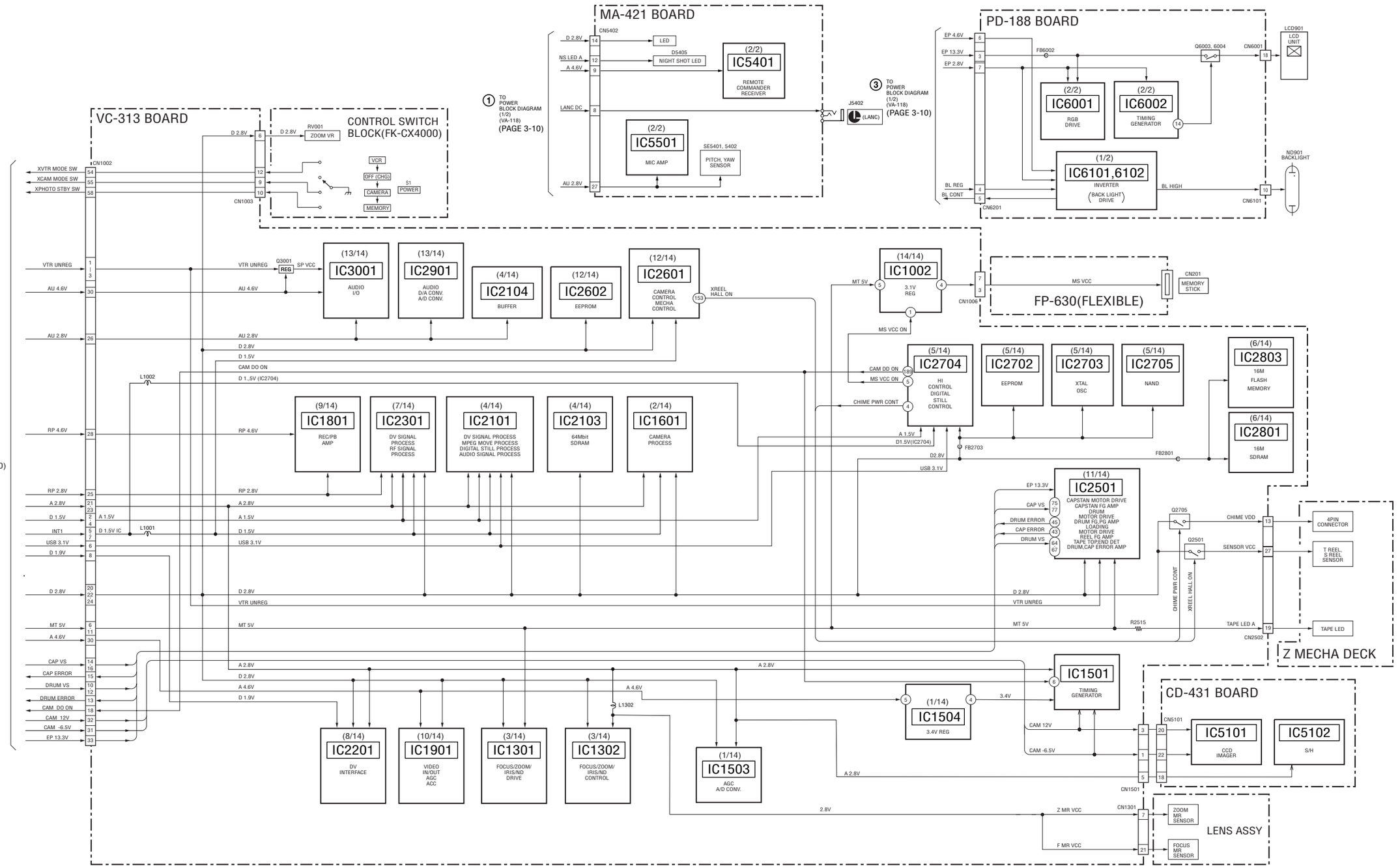
3-5. POWER BLOCK DIAGRAM (1/2)

( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



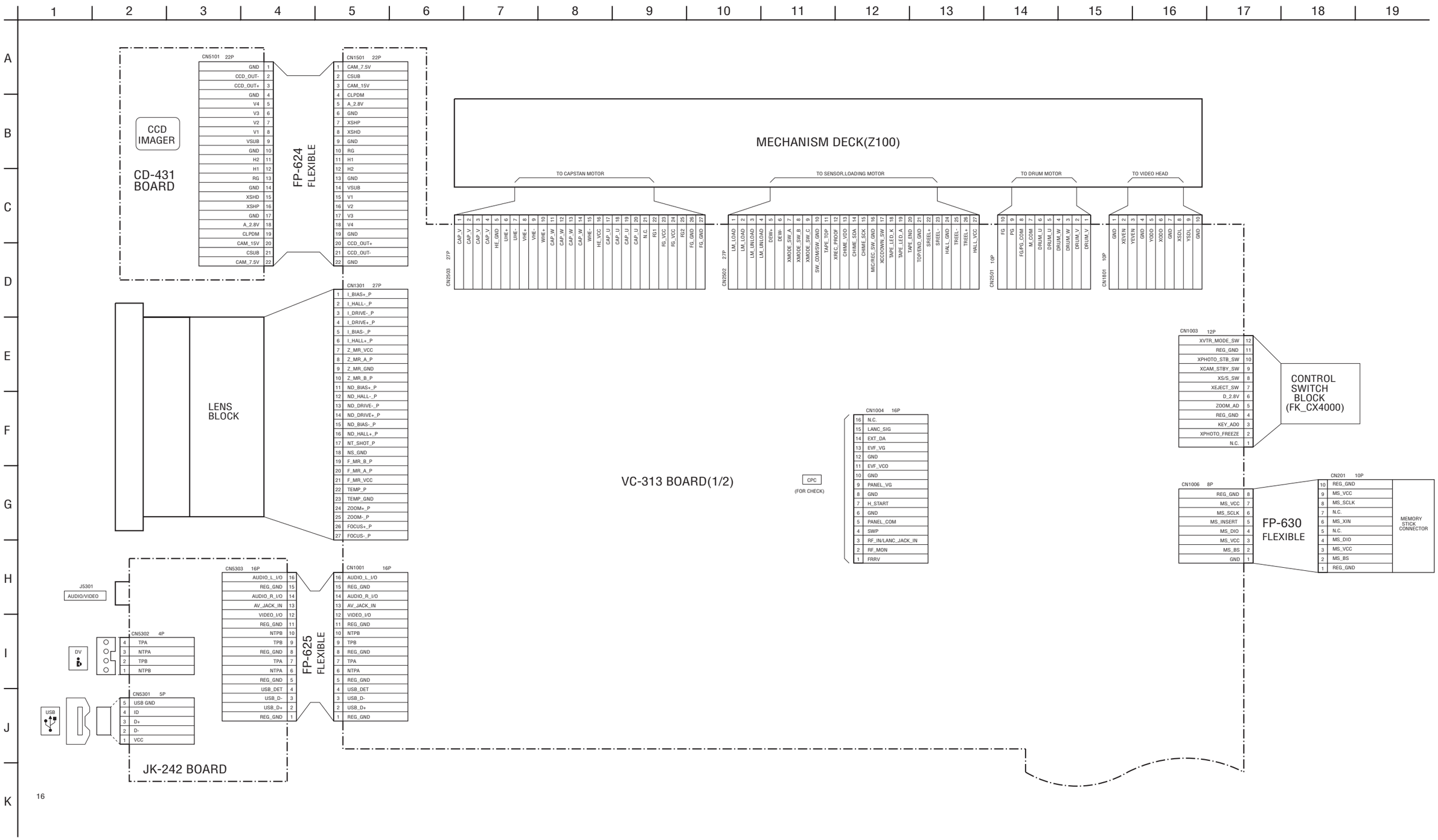
3-6. POWER BLOCK DIAGRAM (2/2)

( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



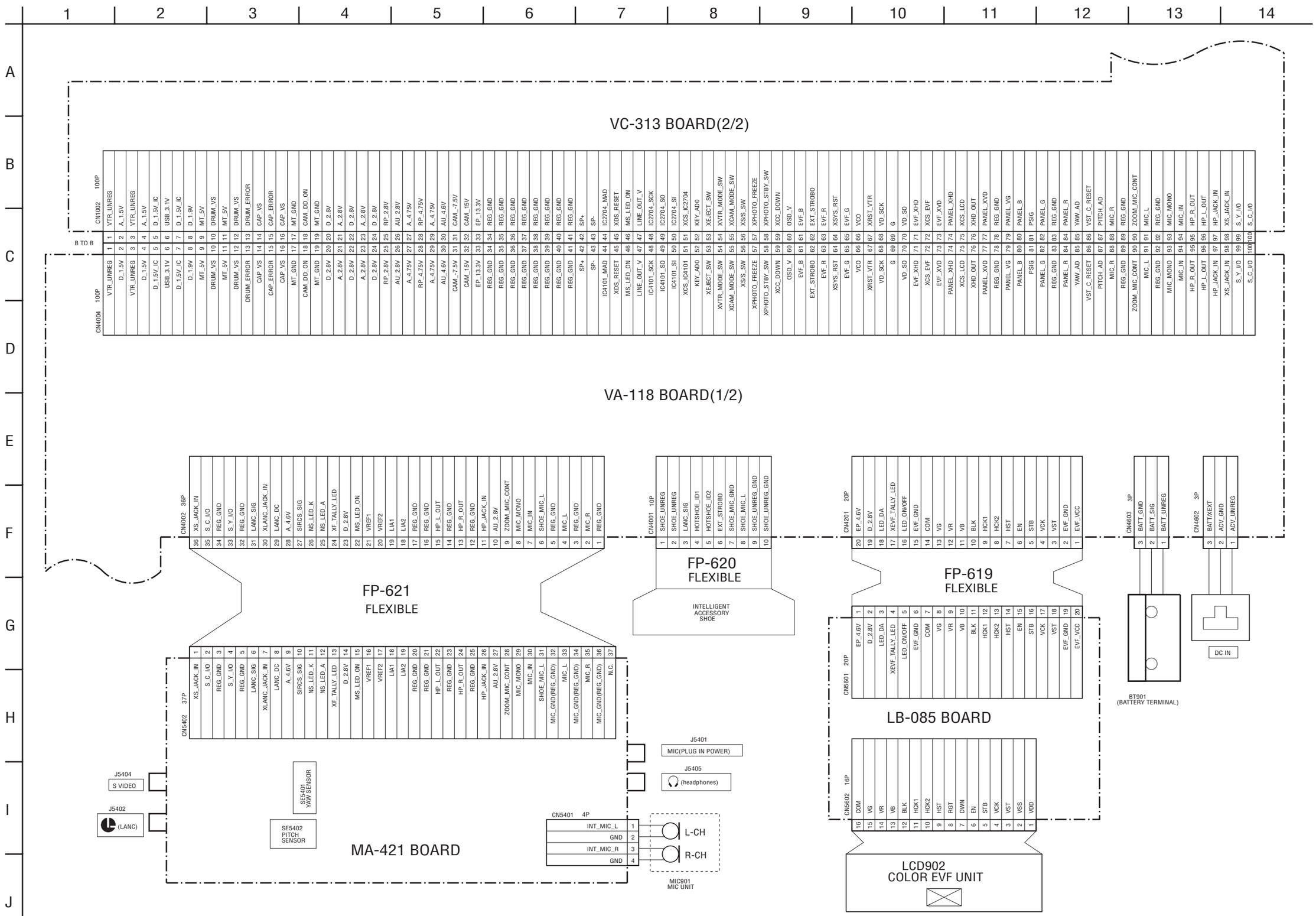
SECTION 4
PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

4-1. FRAME SCHEMATIC DIAGRAM (1/3)

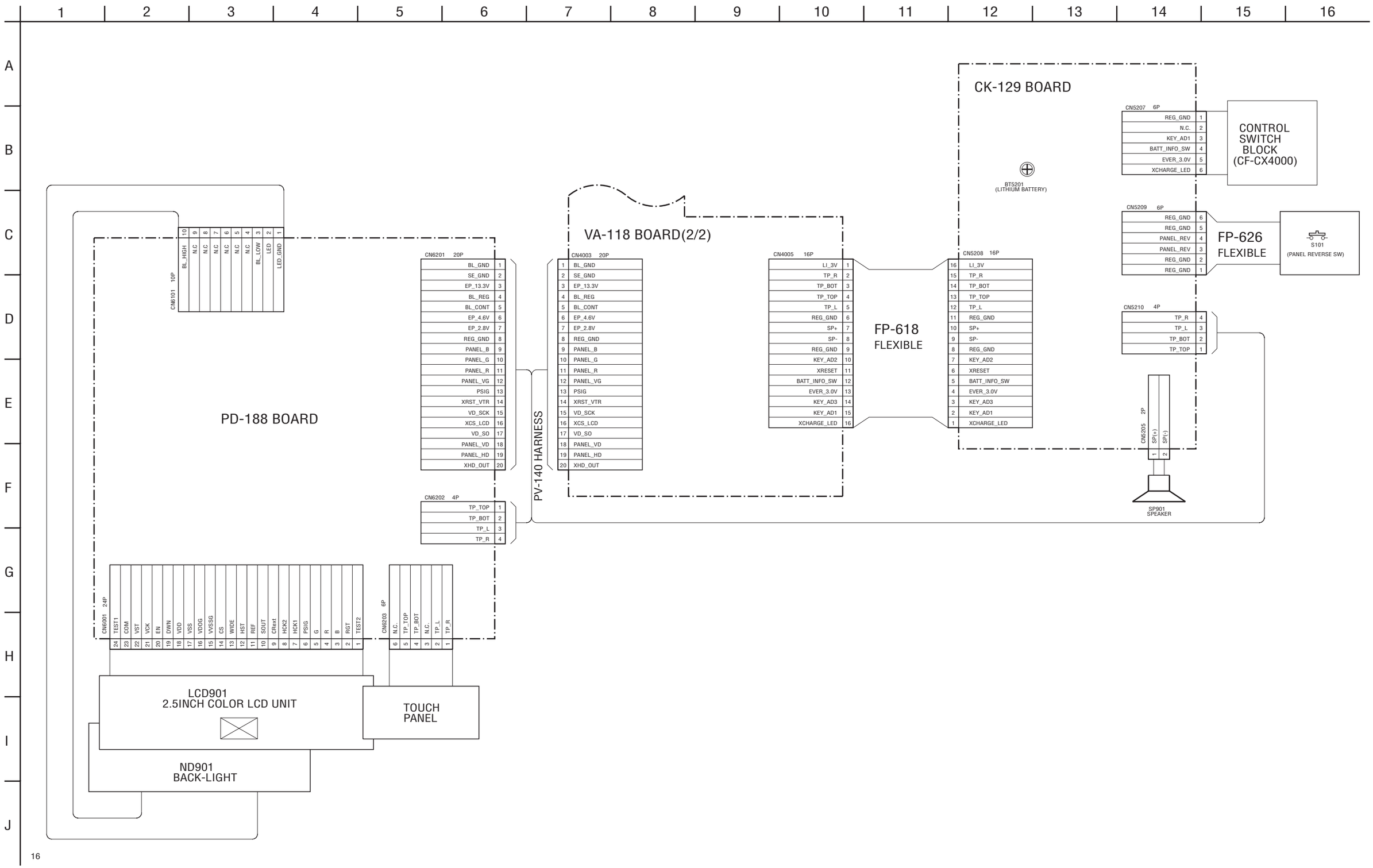


FRAME SCHEMATIC DIAGRAM (1/3)

FRAME SCHEMATIC DIAGRAM (2/3)



FRAME SCHEMATIC DIAGRAM (3/3)



COVER

4-2. SCHEMATIC DIAGRAMS

Link

- CD-431 BOARD (CCD IMAGER)
- LB-085 BOARD (EVF, BACK LIGHT)
- VA-118 BOARD (1/5) (RGB DRIVE, TG)
- VA-118 BOARD (2/5) (HI CONTROL)
- VA-118 BOARD (3/5) (Y/P SENSOR AMP, CONNECTOR)
- VA-118 BOARD (4/5) (DC/DC COVERTER)
- VA-118 BOARD (5/5) (POWER IN, CHARGE)
- CK-129 BOARD (FUNCTION SWITCH)
- PD-188 BOARD (1/2) (DRIVER, TG)
- PD-188 BOARD (2/2) (BACKLIGHT DRIVE)
- JK-242 BOARD (A.V/DV IN/OUT)
- CONTROL SWITCH BLOCK (FK-CX4000)
- MA-421 BOARD (1/2) (MIC AMP)
- MA-421 BOARD (2/2) (Y/P SENSOR, V/A IN/OUT)
- FP-467/468/228 FLEXIBLE (MD BLOCK)

- COMMON NOTE FOR SCHEMATIC DIAGRAMS
- WAVEFORMS

COVER

4-2. SCHEMATIC DIAGRAMS

THIS NOTE IS COMMON FOR SCHEMATIC DIAGRAMS
(In addition to this, the necessary note is printed in each block)

(For schematic diagrams)

- All capacitors are in μF unless otherwise noted. pF : μμF. 50 V or less are not indicated except for electrolytics and tantalums.
- Chip resistors are 1/10 W unless otherwise noted. kΩ=1000 Ω, MΩ=1000 kΩ.
- Caution when replacing chip parts.
  New parts must be attached after removal of chip.
  Be careful not to heat the minus side of tantalum capacitor, Because it is damaged by the heat.
- Some chip part will be indicated as follows.

Example

C541	L452
22U	10UH
TA A	2520

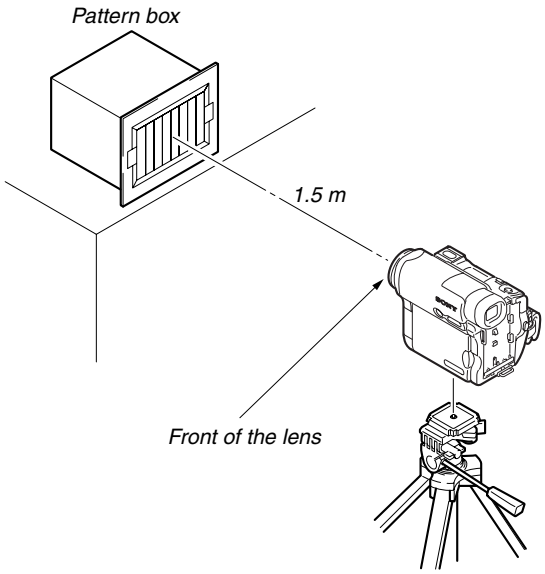
Kinds of capacitor
Temperature characteristics
External dimensions (mm)

- Constants of resistors, capacitors, ICs and etc with XX indicate that they are not used.
  In such cases, the unused circuits may be indicated.
- Parts with * differ according to the model/destination.
  Refer to the mount table for each function.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- Signal name
  XEDIT → $\overline{\text{EDIT}}$ PB/XREC → PB/$\overline{\text{REC}}$
- : non flammable resistor
- : fusible resistor
- : panel designation
- : B+ Line
- : B– Line
- : IN/OUT direction of (+,–) B LINE.
- : adjustment for repair.
- : VIDEO SIGNAL (ANALOG)
- : AUDIO SIGNAL (ANALOG)
- : VIDEO/AUDIO SIGNAL
- : VIDEO/AUDIO/SERVO SIGNAL
- : SERVO SIGNAL
- Circled numbers refer to waveforms.

(Measuring conditions voltage and waveform)

- Voltages and waveforms are measured between the measurement points and ground when camera shoots color bar chart of pattern box. They are reference values and reference waveforms.
  (VOM of DC 10 MΩ input impedance is used)
- Voltage values change depending upon input impedance of VOM used.)

1. Connection



2. Adjust the distance so that the output waveform of Fig. a and the Fig. b can be obtain.

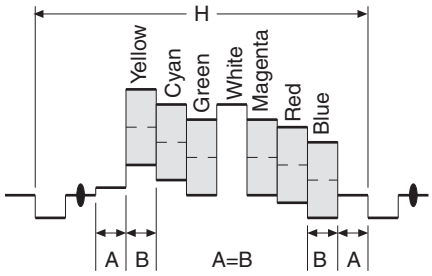


Fig. a (Video output terminal output waveform)

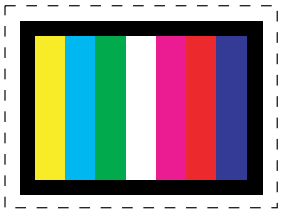


Fig.b (Picture on monitor TV)

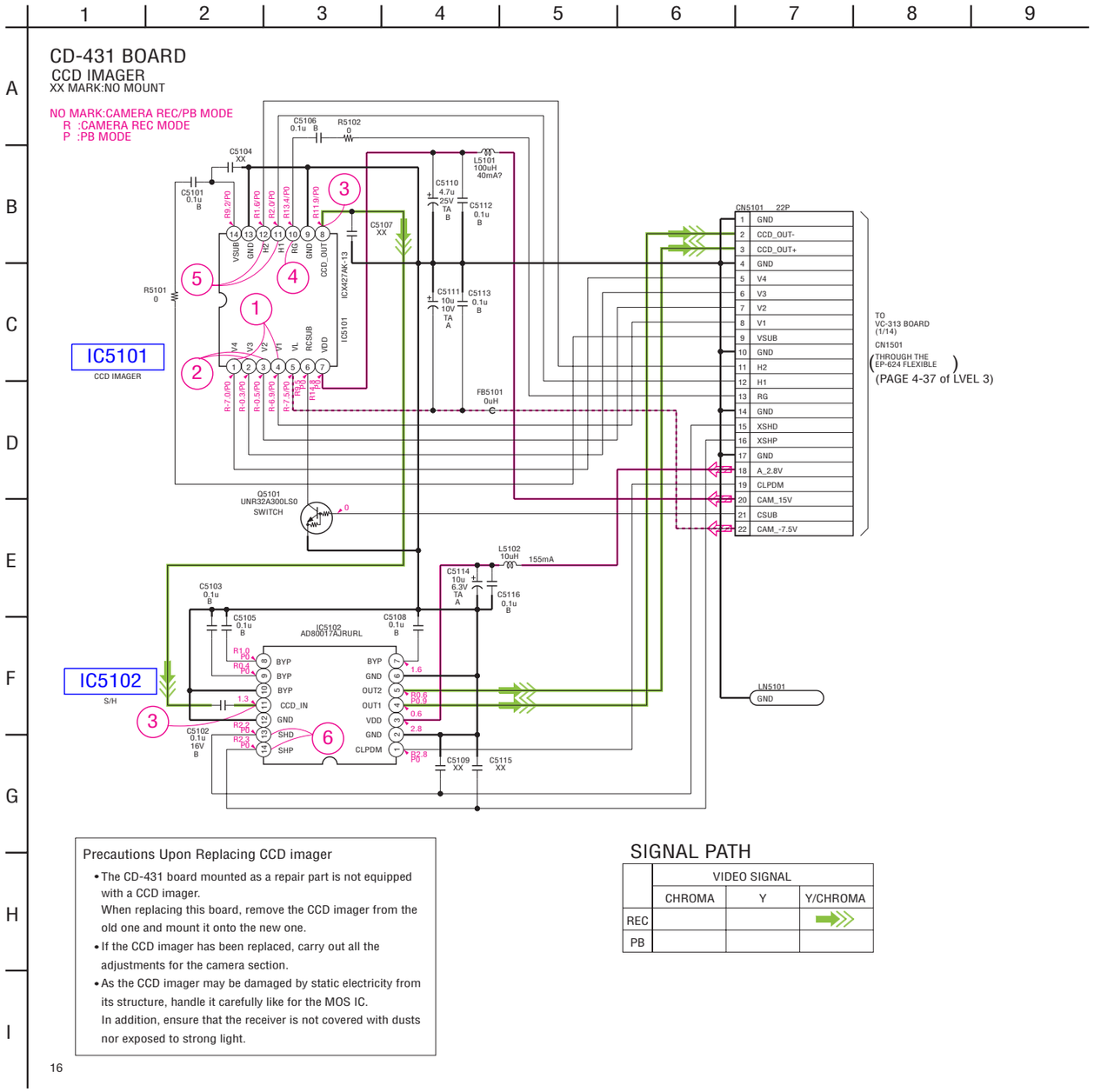
When indicating parts by reference number, please include the board name.

Note : The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	**Note :** Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

4-2. SCHEMATIC DIAGRAMS

For Schematic Diagram

- Refer to page 4-67 for printed wiring board of CD-431 board.
- Refer to page 4-69 for printed wiring board of LB-085 board.

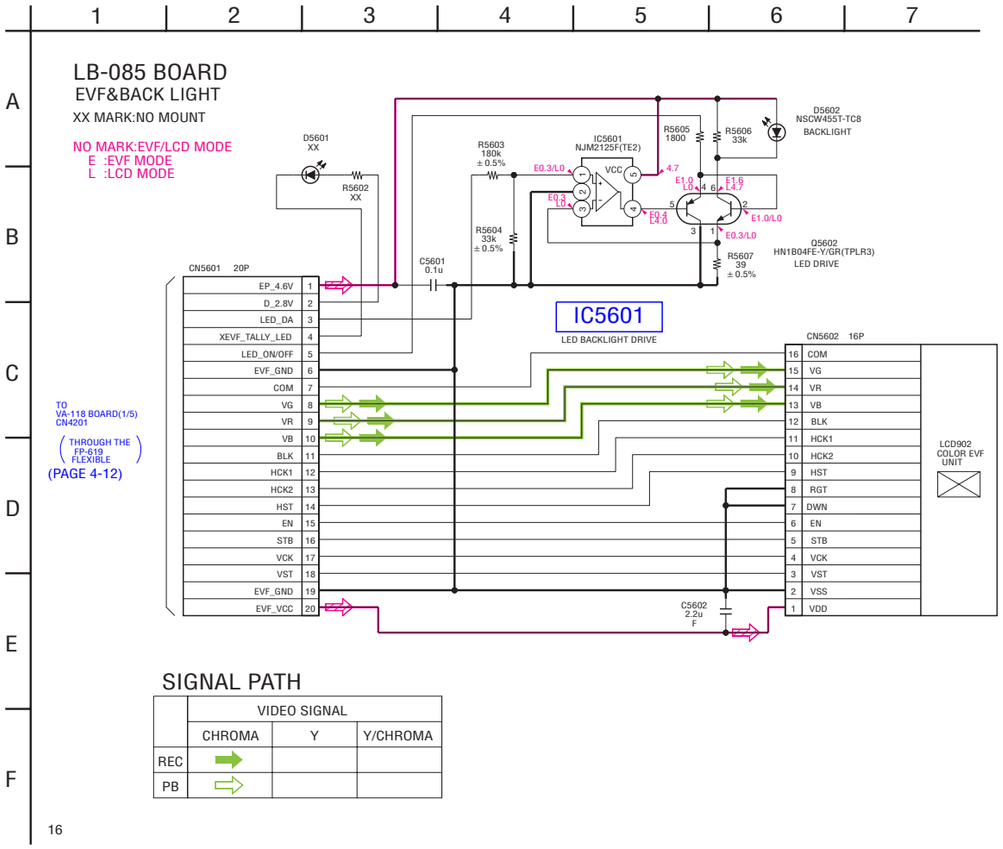


Precautions Upon Replacing CCD imager

- The CD-431 board mounted as a repair part is not equipped with a CCD imager.
  When replacing this board, remove the CCD imager from the old one and mount it onto the new one.
- If the CCD imager has been replaced, carry out all the adjustments for the camera section.
- As the CCD imager may be damaged by static electricity from its structure, handle it carefully like for the MOS IC.
  In addition, ensure that the receiver is not covered with dusts nor exposed to strong light.

SIGNAL PATH

	VIDEO SIGNAL		
	CHROMA	Y	Y/CHROMA
REC			⇉
PB			

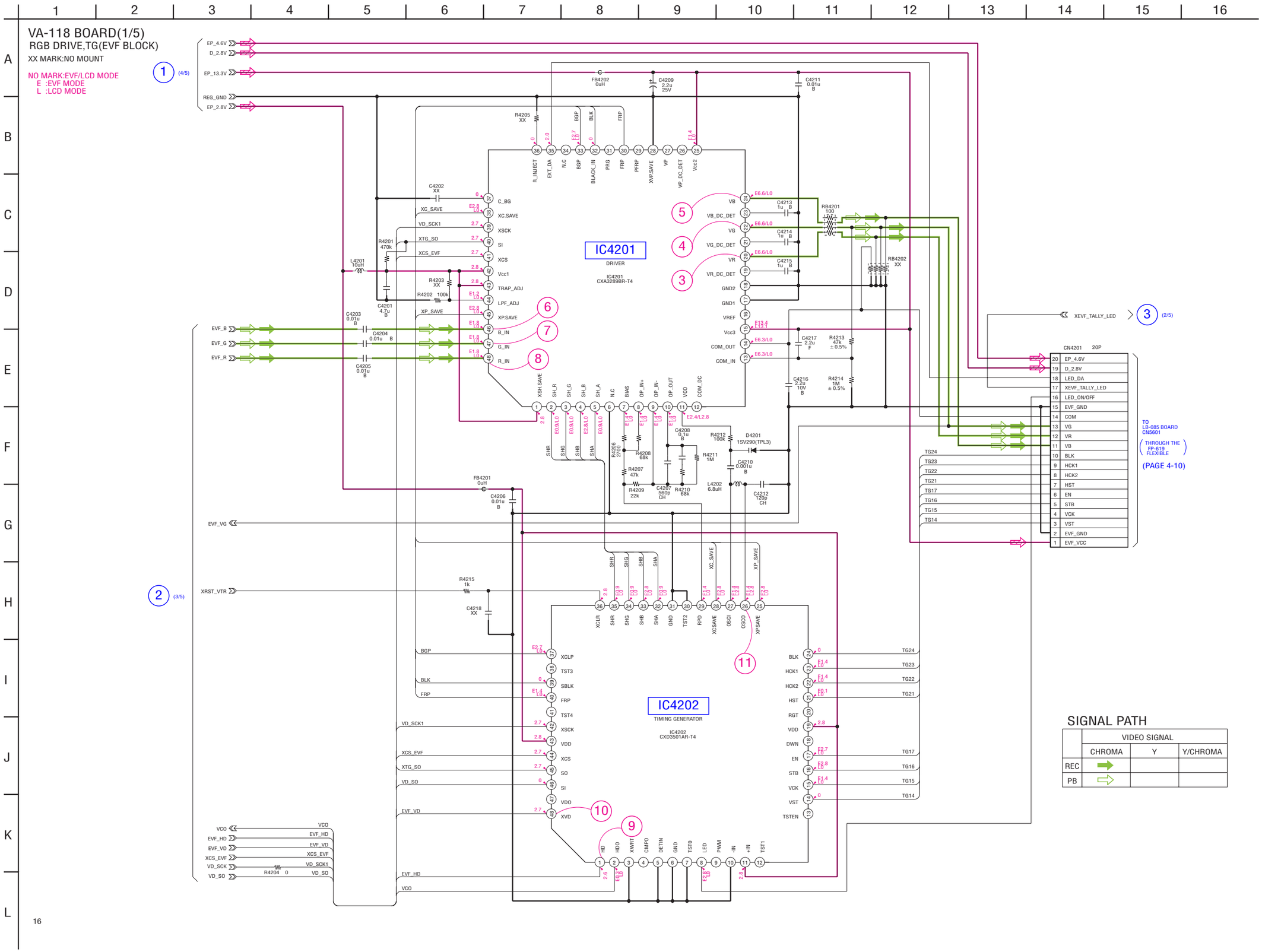


SIGNAL PATH

	VIDEO SIGNAL		
	CHROMA	Y	Y/CHROMA
REC	⇒		
PB	⇨		

For Schematic Diagram

• Refer to page 4-73 for printed wiring board.



For Schematic Diagram

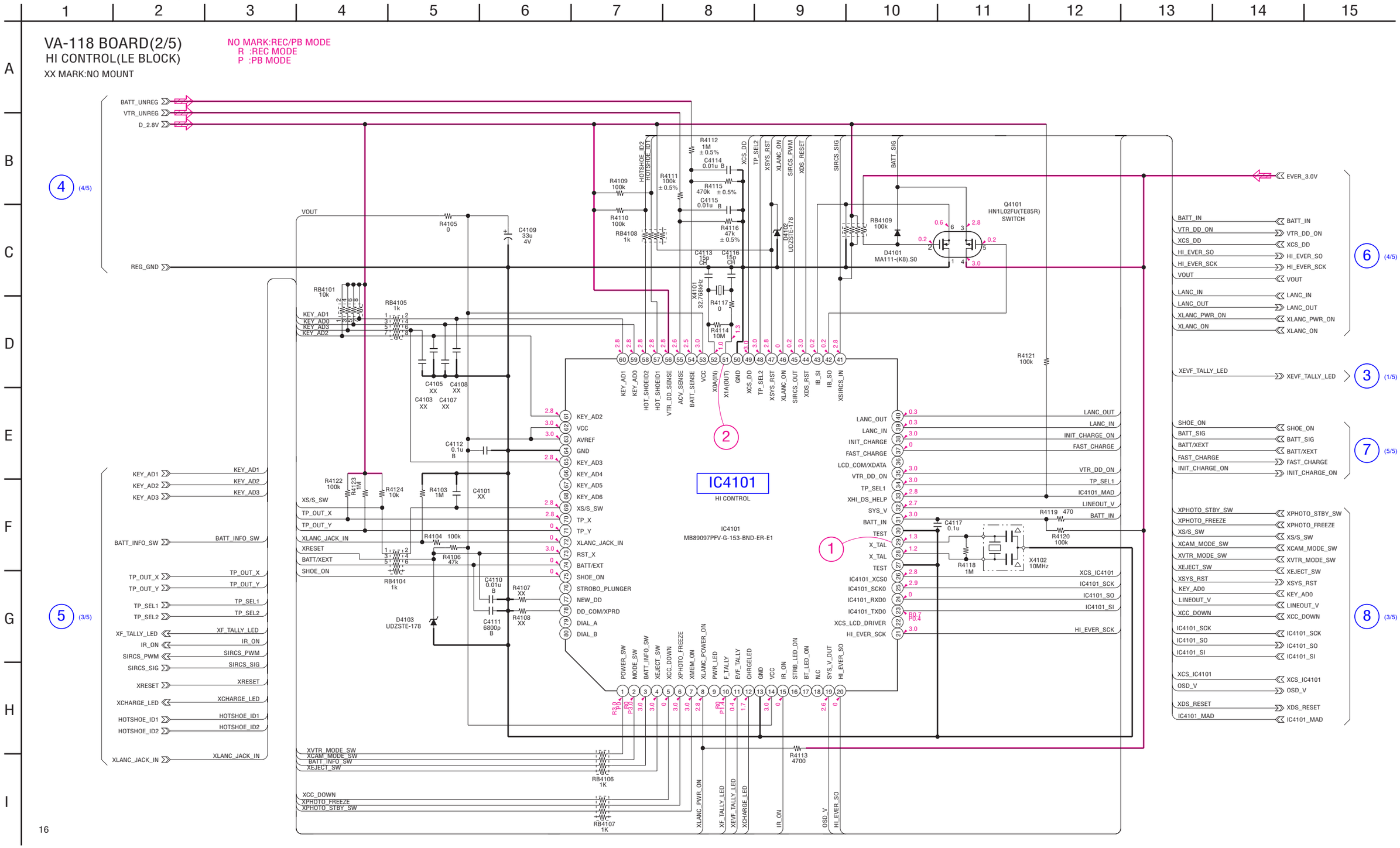
• Refer to page 4-73 for printed wiring board.

VA-118 BOARD(2/5)

HI CONTROL(LE BLOCK)

XX MARK:NO MOUNT

NO MARK:REC/PB MODE
R :REC MODE
P :PB MODE



For Schematic Diagram

• Refer to page 4-73 for printed wiring board.

VA-118 BOARD(3/5)

Y/P SENSOR AMP,CONNECTOR(SE,CN BLOCK)

XX MARK:NO MOUNT

NO MARK:REC/PB MODE

SIGNAL PATH

	VIDEO SIGNAL			AUDIO SIGNAL
	CHROMA	Y	Y/CHROMA	
REC	▶	▶		▶
PB	▷	▷		▷

SIGNAL PATH

	REC	REC/PB	PB
Drum servo (speed and phase)		▶	
Capstan servo (speed and phase)		▶▶	

CN4005 16P

XCHARGE_LED 16
KEY_AD1 15
KEY_AD3 14
EVER_3.0V 13
BATT_INFO_SW 12
XRESET 11
KEY_AD2 10
REG_GND 9
SP- 8
SP+ 7
REG_GND 6
TP_L 5
TP_TOP 4
TP_BOT 3
TP_R 2
LI_3V 1

TO CK-129 BOARD CN5208 (THROUGH THE FP-618 FLEXIBLE) (PAGE 4-21)

Q4003 UNR31A100LS0 SWITCH

Q4004 RN1902FE(TPLR3) SWITCH

Q4005 RN2902FE(TPLR3) SWITCH

C4006 XX

C4002 0.1u B

C4003 0.1u B

C4005 4.7u B

R4009 0

D4001 MAZW082H0LS0

D4002 MAZW082H0LS0

FP-620 FLEXIBLE

8P		10P	CN4001 10P	
INTELLIGENT ACCESSORY SHOE	SHOE_UNREG_GND 8	10 SHOE_UNREG_GND	SHOE_UNREG_GND	10
	SHOE_MIC_L 7	9 SHOE_UNREG_GND	SHOE_UNREG_GND	9
	SHOE_MIC_GND 6	8 SHOE_MIC_L	SHOE_MIC_L	8
	EXT_STROBO 5	7 SHOE_MIC_GND	SHOE_MIC_GND	7
	SHOE_ID2 4	6 EXT_STROBO	EXT_STROBO	6
	SHOE_ID1 3	5 HOTSHOE_ID2	HOTSHOE_ID2	5
	LANC_SIG 2	4 HOTSHOE_ID1	HOTSHOE_ID1	4
	SHOE_UNREG 1	3 LANC_SIG	LANC_SIG	3
		2 SHOE_UNREG	SHOE_UNREG	2
		1 SHOE_UNREG	SHOE_UNREG	1

CN4002 36P

REG_GND 1
MIC_R 2
REG_GND 3
MIC_L 4
REG_GND 5
SHOE_MIC_L 6
MIC_IN 7
MIC_MONO 8
ZOOM_MIC_CONT 9
AU_2.8V 10
HP_JACK_IN 11
REG_GND 12
HP_R_OUT 13
REG_GND 14
HP_L_OUT 15
REG_GND 16
REG_GND 17
LIA2 18
LIA1 19
VREF2 20
VREF1 21
MS_LED_ON 22
D_2.8V 23
XF_TALLY_LED 24
NS_LED_A 25
NS_LED_K 26
SIRCS_SIG 27
A_4.6V 28
LANC_DC 29
XLANC_JACK_IN 30
LANC_SIG 31
REG_GND 32
S_Y_I/O 33
REG_GND 34
S_C_I/O 35
XS_JACK_IN 36

TO MA-421 BOARD(2/2) CN5402 (THROUGH THE FP-621 FLEXIBLE) (PAGE 4-34)

XRESET → XRESET, LANC_DC, LANC_SIG (10 (4/5))

REG_GND(SHOE_GND), SHOE_UNREG (11 (5/5))

TP_SEL2, TP_OUT_Y, TP_SEL1, TP_OUT_X, XCHARGE_LED, KEY_AD1, KEY_AD3, BATT_INFO_SW, XRESET, KEY_AD2, HOTSHOE_ID2, HOTSHOE_ID1, XF_TALLY_LED, SIRCS_SIG, XLANC_JACK_IN, IR_ON, SIRCS_PWM → (5 (2/5))

EXT_STROBO, HOTSHOE_ID2, HOTSHOE_ID1, MIC_R, MIC_L, MIC_IN, MIC_MONO, ZOOM_MIC_CONT, HP_JACK_IN, HP_R_OUT, HP_L_OUT, MS_LED_ON, XF_TALLY_LED, SIRCS_SIG, XLANC_JACK_IN, S_Y_I/O, S_C_I/O

LI_3V, EVER_3.0V → (9 (4/5))

CN4003 20P

BL_GND 1
SE_GND 2
EP_13.3V 3
BL_REG 4
BL_CONT 5
EP_4.6V 6
EP_2.8V 7
REG_GND 8
PANEL_B 9
PANEL_G 10
PANEL_R 11
PANEL_VG 12
PSIG 13
XRST_VTR 14
VD_SCK 15
XCS_LCD 16
VD_SO 17
PANEL_VD 18
PANEL_HD 19
XHD_OUT 20

REG_GND (BL_GND), BL_REG, EP_4.6V, EP_2.8V, BL_CONT → (12 (4/5))

PANEL_B, PANEL_G, PANEL_R, PANEL_VG, P_SIG, XRST_VTR, VD_SCK, XCS_LCD, VD_SO, PANEL_VD, PANEL_HD, XHD_OUT → (13 (4/5))

C4001 0.1u, R4002 1k

TO PD-188 BOARD(2/2) CN6201 (THROUGH THE PU-140 HARNESS) (PAGE 4-25)

XRST_VTR, VD_SCK, VD_SO, EVF_VD, XCS_EVF, EVF_HD, EVF_VG, VCO, EVF_G, EVF_R, EVF_B → (2 (1/5))

CN4004 100P B TO B

S_C_I/O	100	S_C_I/O	S_C_I/O
S_Y_I/O	99	S_Y_I/O	S_Y_I/O
XS_JACK_IN	98	XS_JACK_IN	XS_JACK_IN
HP_JACK_IN	97	HP_JACK_IN	HP_JACK_IN
HP_L_OUT	96	HP_L_OUT	HP_L_OUT
HP_R_OUT	95	HP_R_OUT	HP_R_OUT
MIC_IN	94	MIC_IN	MIC_IN
MIC_MONO	93	MIC_MONO	MIC_MONO
REG_GND	92	REG_GND	REG_GND
MIC_L	91	MIC_L	MIC_L
ZOOM_MIC_CONT	90	ZOOM_MIC_CONT	ZOOM_MIC_CONT
REG_GND	89	REG_GND	REG_GND
MIC_R	88	MIC_R	MIC_R
PITCH_AD	87	PITCH_AD	PITCH_AD
VST_C_RESET	86	VST_C_RESET	VST_C_RESET
YAW_AD	85	YAW_AD	YAW_AD
PANEL_R	84	PANEL_R	PANEL_R
REG_GND	83	REG_GND	REG_GND
PANEL_G	82	PANEL_G	PANEL_G
PSIG	81	PSIG	PSIG
PANEL_B	80	PANEL_B	PANEL_B
PANEL_VG	79	PANEL_VG	PANEL_VG
REG_GND	78	REG_GND	REG_GND
PANEL_VD	77	PANEL_XVD	PANEL_VD
XHD_OUT	76	XHD_OUT	XHD_OUT
XCS_LCD	75	XCS_LCD	XCS_LCD
PANEL_HD	74	PANEL_XHD	PANEL_HD
EVF_VD	73	EVF_XVD	EVF_VD
XCS_EVF	72	XCS_EVF	XCS_EVF
EVF_HD	71	EVF_XHD	EVF_HD
VD_SO	70	VD_SO	VD_SO
EVF_VG	69	G	EVF_VG
VD_SCK	68	VD_SCK	VD_SCK
XRST_VTR	67	XRST_VTR	XRST_VTR
VCO	66	VCO	VCO
EVF_G	65	EVF_G	EVF_G
EVF_R	64	XSYS_RST	EVF_R
EVF_B	63	EVF_R	EXT_STROBO
EXT_STROBO	62	EXT_STROBO	EVF_B
OSD_V	61	EVF_B	OSD_V
XCC_DOWN	60	OSD_V	XCC_DOWN
XPHOTO_STBY_SW	59	XCC_DOWN	XPHOTO_STBY_SW
XPHOTO_FREEZE	58	XPHOTO_STBY_SW	XPHOTO_FREEZE
XS/S_SW	57	XPHOTO_FREEZE	XS/S_SW
XCAM_MODE_SW	56	XS/S_SW	XCAM_MODE_SW
XVTR_MODE_SW	55	XCAM_MODE_SW	XVTR_MODE_SW
XEJECT_SW	54	XVTR_MODE_SW	XEJECT_SW
KEY_AD0	53	XEJECT_SW	KEY_AD0
XCS_IC4101	52	KEY_AD0	XCS_IC4101
IC4101_SI	51	XCS_IC4101	IC4101_SI
IC4101_SO	50	IC4101_SI	IC4101_SO
IC4101_SCK	49	IC4101_SO	IC4101_SCK
LINEOUT_V	48	IC4101_SCK	LINE_OUT_V
XDS_RESET	47	LINEOUT_V	MS_LED_ON
IC4101_MAD	46	XDS_RESET	XDS_RESET
SP-	45	IC4101_MAD	IC4101_MAD
SP+	44	SP-	SP-
REG_GND	43	SP+	SP+
REG_GND	42	REG_GND	REG_GND
REG_GND	41	REG_GND	REG_GND
REG_GND	40	REG_GND	REG_GND
REG_GND	39	REG_GND	REG_GND
REG_GND	38	REG_GND	REG_GND
REG_GND	37	REG_GND	REG_GND
REG_GND	36	REG_GND	REG_GND
REG_GND	35	REG_GND	REG_GND
EP_13.3V	34	REG_GND	EP_13.3V
CAM_15V	33	EP_13.3V	CAM_15V
CAM_-7.5V	32	CAM_15V	CAM_-7.5V
AU_4.6V	31	CAM_-7.5V	AU_4.6V
A_4.75V	30	AU_4.6V	A_4.75V
RP_4.75V	29	A_4.75V	RP_4.75V
A_4.75V	28	RP_4.75V	A_4.75V
AU_2.8V	27	A_4.75V	AU_2.8V
RP_2.8V	26	AU_2.8V	RP_2.8V
D_2.8V	25	RP_2.8V	D_2.8V
A_2.8V	24	D_2.8V	A_2.8V
D_2.8V	23	A_2.8V	D_2.8V
A_2.8V	22	D_2.8V	A_2.8V
D_2.8V	21	A_2.8V	D_2.8V
MT_GND	20	D_2.8V	MT_GND
CAM_DD_ON	19	MT_GND	CAM_DD_ON
MT_GND	18	CAM_DD_ON	MT_GND
CAP_VS	17	MT_GND	CAP_VS
CAP_ERROR	16	CAP_VS	CAP_ERROR
CAP_VS	15	CAP_ERROR	CAP_VS
DRUM_ERROR	14	CAP_VS	DRUM_ERROR
DRUM_VS	13	DRUM_ERROR	DRUM_VS
MT_5V	12	DRUM_VS	MT_5V
D_1.9V	11	MT_5V	D_1.9V
USB_3.1V	10	D_1.9V	D_1.5V_IC
D_1.5V_IC	9	USB_3.1V	USB_3.1V
D_1.5V	8	D_1.5V_IC	D_1.5V_IC
VTR_UNREG	7	D_1.5V	D_1.5V
D_1.5V	6	VTR_UNREG	VTR_UNREG
VTR_UNREG	5	D_1.5V	

TO VC-312 BOARD (14/14) CN1002 (PAGE 4-64 of LVEL 3)

(8 (2/5))

CAM_DD_ON, CAP_ERROR, CAP_VS, DRUM_ERROR, DRUM_VS → (14 (4/5))

REG_GND, EP_13.3V, CAM_15V, CAM_-7.5V, AU_4.6V, RP_4.6V, A_4.6V, AU_2.8V, RP_2.8V, A_2.8V, D_2.8V → (15 (4/5))

REG_GND (MT_GND)

C4303 22u 4V A
C4304 22u 4V A
C4301 0.1u B
C4302 0.1u B
C4305 0.047u B
C4306 0.047u B
C4307 0.047u B
C4308 0.047u B
C4309 10u 6.3V
C4310 10u 6.3V
C4311 10u 6.3V
C4312 10u 6.3V
C4313 XX
C4314 4.7u B
R4303 10k
R4304 1M
R4305 XX
R4301 1M
R4302 10k
L4301 10uH
RB4301 22k

IC4301 UPC6736GR-EJG-E2 YAW/PITCH SENSOR AMP

R4010 XX
R4004 22
R4005 22
R4006 68
R4007 3300
R4008 0
Q4001 2SC5663T2L LED DRIVE
Q4002 UNR32A500LS0 SWITCH

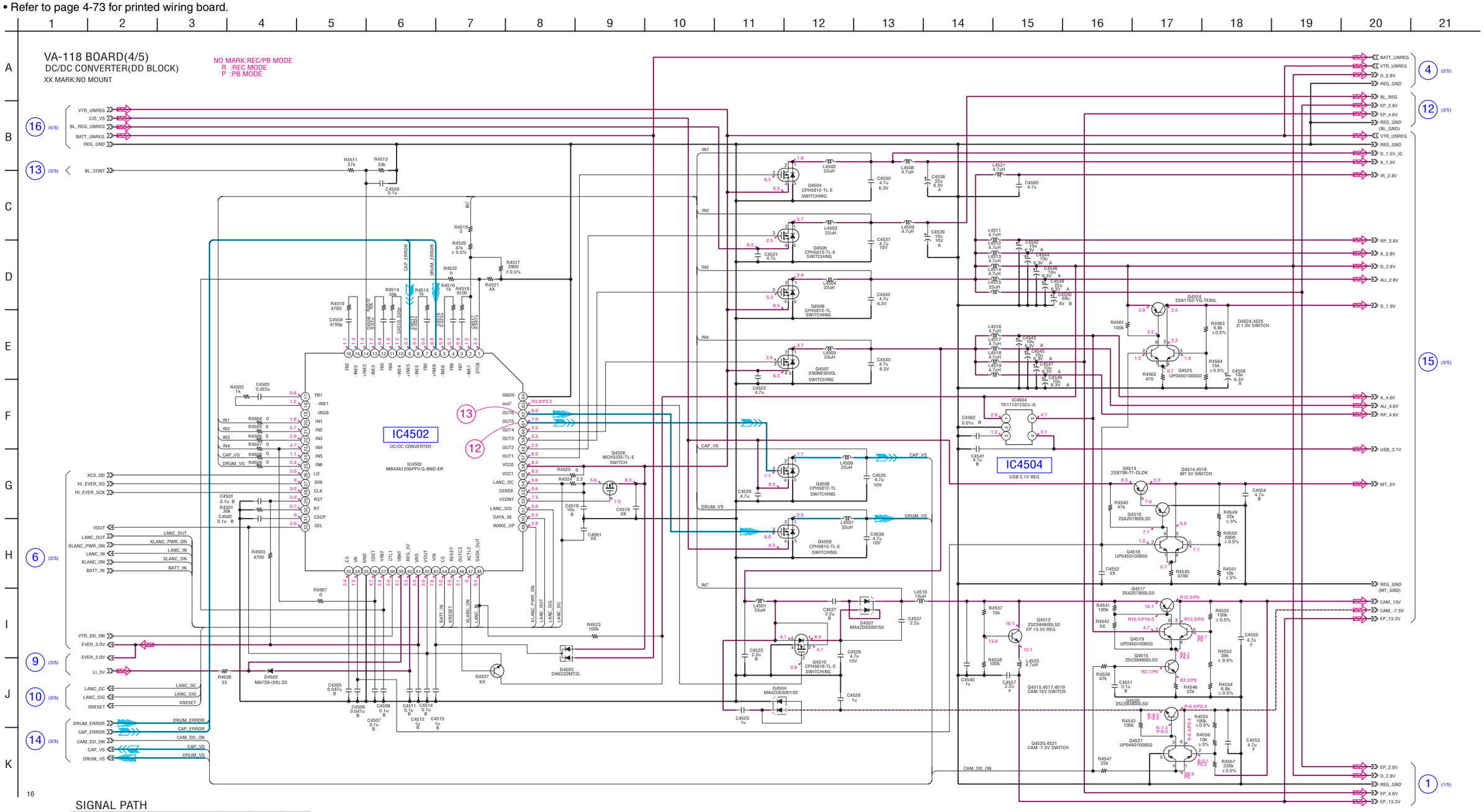
PITCH_AD, VST_C_RESET, YAW_AD, SIRCS_PWM, IR_ON

FP-620 FLEXIBLE is replaced as a block.
So that this PRINTED WIRING BOARD is omitted.

COVER

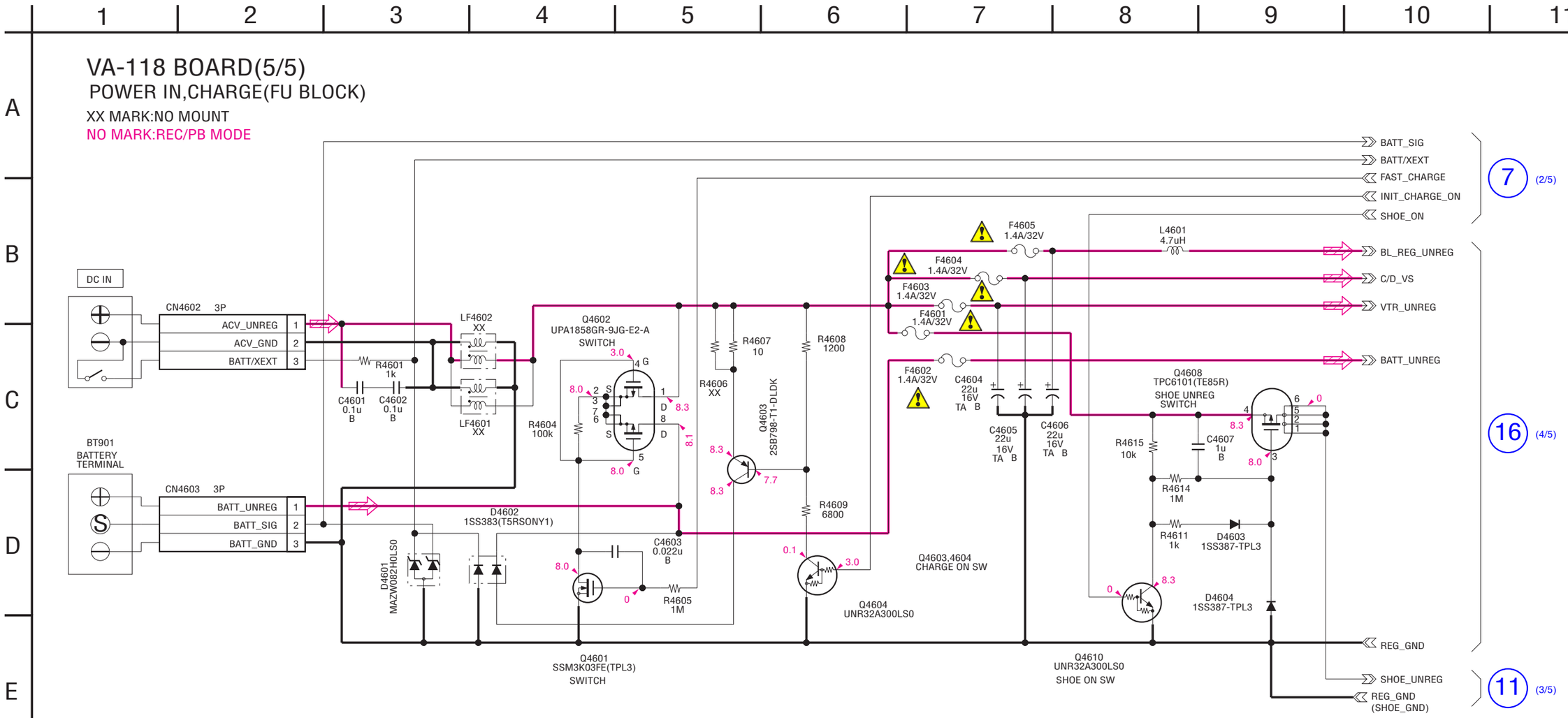
For Schematic Diagram

• Refer to page 4-73 for printed wiring board.



For Schematic Diagram

• Refer to page 4-73 for printed wiring board.

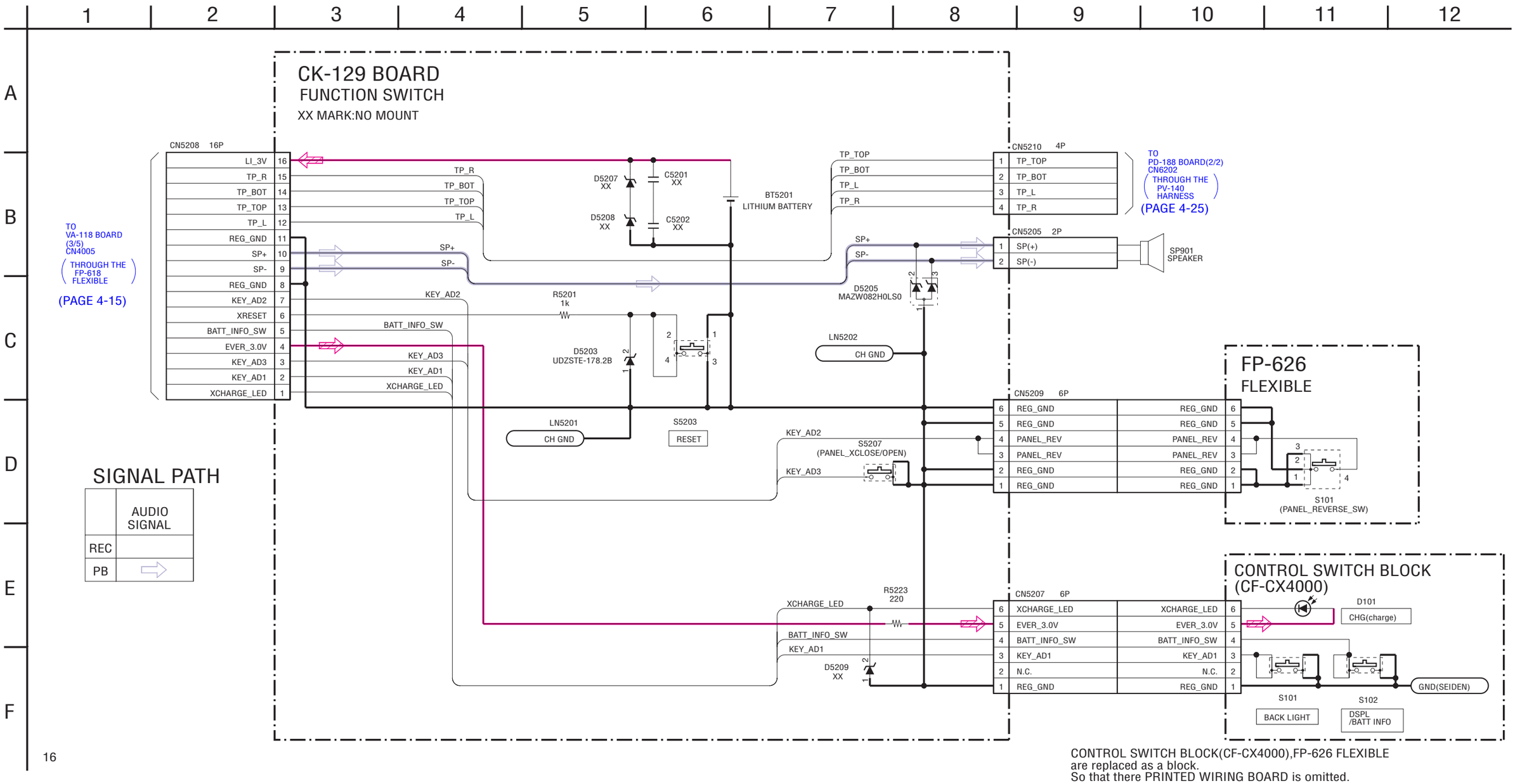


16

Note :	**Note :**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

For Schematic Diagram

• Refer to page 4-77 for printed wiring board.



CONTROL SWITCH BLOCK(CF-CX4000),FP-626 FLEXIBLE are replaced as a block.
So that there PRINTED WIRING BOARD is omitted.

For Schematic Diagram

• Refer to page 4-79 for printed wiring board.

PD-188 BOARD(1/2)

DRIVER,TG(RGB/TG BLOCK)

XX MARK:NO MOUNT

NO MARK:REC/PB MODE

IC6001 DRIVER IC6001 CXA3289BR-T4

IC6002 TIMING GENERATOR IC6002 CXD3512R-T4

Q6004 2SA207800LS0 SWITCHING

Q6003 UNR32A300LS0 INVERTER

Q6005 2SA207800LS0 LEVEL SHIFT

Q6002 HN1B04FE-Y/GR(TPLR3) SWITCH

Q6001 HN1B04FE-Y/GR(TPLR3) SWITCH

CN6001 24P

24	TEST1
23	COM
22	VST
21	VCK
20	EN
19	DWN
18	VDD
17	VSS
16	VDOG
15	VVSSG
14	CS
13	WIDE
12	HST
11	REF
10	SOUT
9	CRext
8	HCK2
7	HCK1
6	PSIG
5	G
4	R
3	B
2	RGT
1	TEST2

LCD901 2.5INCH COLOR LCD UNIT (with Touch PANEL)

SIGNAL PATH

	VIDEO SIGNAL		
	CHROMA	Y	Y/CHROMA
REC	➡		
PB	⇨		

For Schematic Diagram

• Refer to page 4-79 for printed wiring board.

PD-188 BOARD(2/2)

BACKLIGHT DRIVE(BL BLOCK)

XX MARK:NO MOUNT

NO MARK:REC/PB MODE

CN6201 20P

BL_GND	1
SE_GND	2
EP_13.3V	3
BL_REG	4
BL_CONT	5
EP_4.6V	6
EP_2.8V	7
REG_GND	8
PANEL_B	9
PANEL_G	10
PANEL_R	11
PANEL_VG	12
PSIG	13
XRST_VTR	14
VD_SCK	15
XCS_LCD	16
VD_SO	17
PANEL_VD	18
PANEL_HD	19
XHD_OUT	20

TO VA-118 BOARD (3/5) CN4003

THROUGH THE PV-140 HARNESS

(PAGE 4-16)

L6101 82uH

C6101 4.7u B

R6106 1800 1/10W

C6103 0.015u B

Q6102 CPH5504-TL-E SWITCHING

Q6103 XX

T6101 INVERTER TRANSFORMER

C6105 12p 3.15kV

CN6101 10P

10	BL_HIGH
9	N.C.
8	N.C.
7	N.C.
6	N.C.
5	N.C.
4	N.C.
3	BL_LOW
2	LED
1	LED_GND

ND901 BACKLIGHT

IC6102

IC6102 CURRENT DETECT

IC6102 TA75S393F-TE85R

R6104 180k

R6105 22k

C6102 XX

R6109 XX

Q6104 XX

D6104 XX

D6103 MA111-(K8).S0

R6108 22k

C6104 0.1u B

R6110 470

R6101 XX

D6101 XX

LN6101

CH_GND

R6102 XX

D6102 XX

R6103 10k

IC6101 TC7W53FU(TE12R)

R6107 10k

IC6101

SELECT SWITCH

Q6101 UNR32A300LS0 SWITCH

1 (1/2)

EP_13.3V
EP_2.8V
REG_GND

2 (1/2)

PANEL_B
PANEL_G
PANEL_R
PANEL_VG
PSIG
XRST_VTR
VD_SCK
XCS_LCD
VD_SO
PANEL_VD
PANEL_HD
XHD_OUT

3 (1/2)

DETIN

BL_ON

DAC

LED

TO CK-129 BOARD CN5210

THROUGH THE PV-140 HARNESS

(PAGE 4-22)

CN6202 4P

TP_TOP	1
TP_BOT	2
TP_L	3
TP_R	4

TOUCH PANEL (included LCD panel)

CN6203 6P

TP_R	1
TP_L	2
N.C.	3
TP_BOT	4
TP_TOP	5
N.C.	6

D6201 UDZSTE-178.2B

SIGNAL PATH

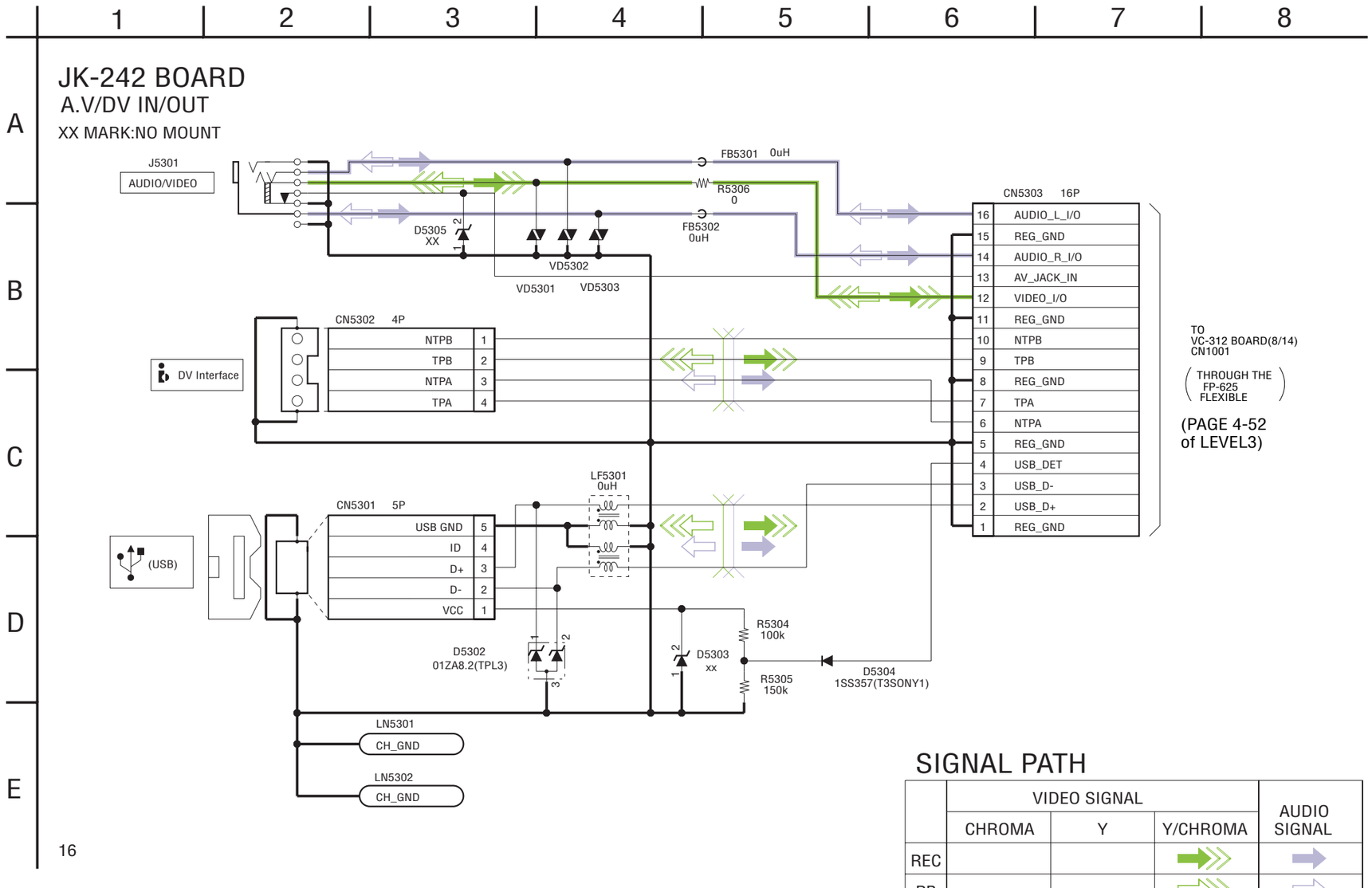
	VIDEO SIGNAL		
	CHROMA	Y	Y/CHROMA
REC	➡		
PB	⇨		

Note :
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Note :
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

For Schematic Diagram

• Refer to page 4-81 for printed wiring board.



SIGNAL PATH

	VIDEO SIGNAL			AUDIO SIGNAL
	CHROMA	Y	Y/CHROMA	
REC			➡	➡
PB			⇨	⇨

1 2 3 4 5 6 7 8

A

B

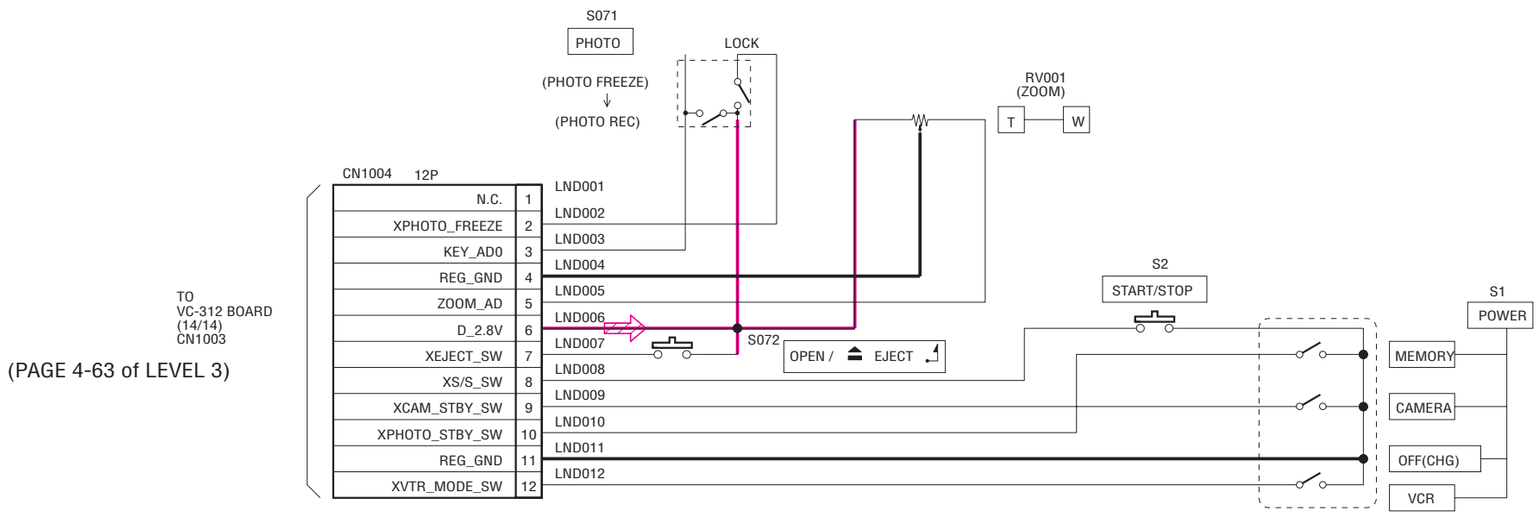
C

D

16

CONTROL SWITCH BLOCK
(FK-CX4000)

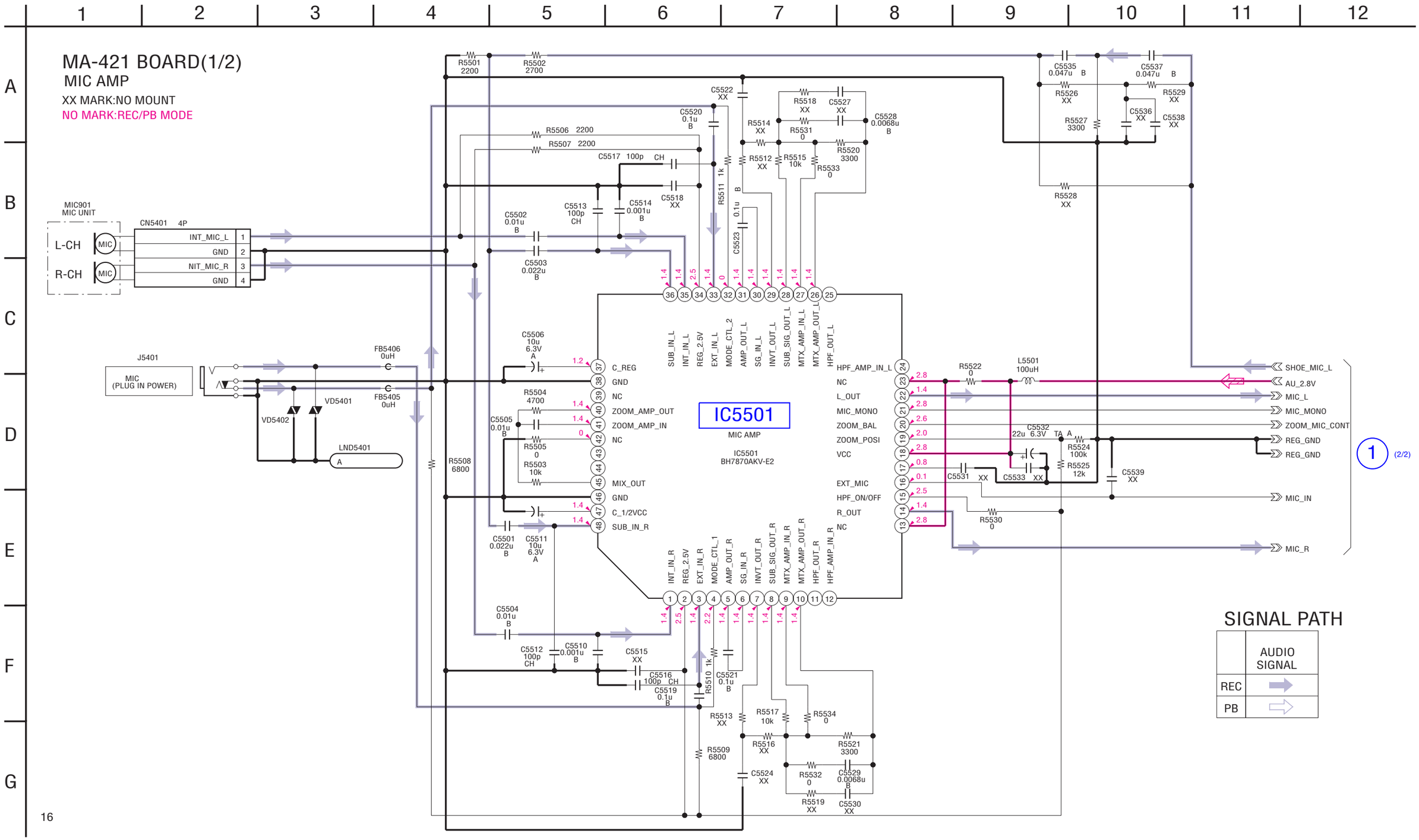
XX MARK:NO MOUNT



CONTROL SWITCH BLOCK (FK-CX4000) is replaced as a block.
So that these PRINTED WIRING BOARD are omitted.

For Schematic Diagram

• Refer to page 4-83 for printed wiring board.



For Schematic Diagram

• Refer to page 4-83 for printed wiring board.

MA-421 BOARD(2/2)

Y/P SENSOR,V/A IN/OUT

XX MARK:NO MOUNT

NO MARK:REC/PB MODE

J5404
S VIDEO

R5407 0
R5408 0
S_Y_I/O
XS_JACK_IN
S_C_I/O

D5408
UDZSTE-178.2B

VD5408 VD5407

LN5402
CH_GND

IC5401
REMOTE COMMANDER
RESIEVER

IC5401
RS-670
4.6 4.6
OUT VCC GND GND

D5405
CL-330IRS-X-TU
(NIGHTSHOT LED)
R5405 47

C5404 4.7u B

D5404
MA111-(K8).S0

R5406 1800
D5407
TLRMV1021(T15SOY.F)
(ACCESS)

R5402 1800
D5401
TLRMV1021(T15SOY.F)
(TALLY)

D5409
UDZSTE-178.2B

J5402
LANC

FB5408 0uH
FB5409 0uH
FB5407 0uH
LANC_DC
LANC_SIG
XLANC_JACK_IN
R5403 0
VD5403
D5403
MAZW082H0LS0

FB5410 0uH
FB5411 0uH
HP_R_OUT
HP_L_OUT
VD5409 VD5410
J5405
(headphones)
HP_JACK_IN

FB5401 0uH
FB5402 0uH
LIA2
VREF2
D5410
UDZSTE-178
SE5401
(YAW SENSOR)
Vref GND
Vout VCC

R5401 0
FB5404 0uH
FB5403 0uH
LIA1
VREF1
SE5402
(PITCH SENSOR)
Vref GND
Vout VCC

CN5402 37P

1	XS_JACK_IN
2	S_C_I/O
3	REG_GND
4	S_Y_I/O
5	REG_GND
6	LANC_SIG
7	XLANC_JACK_IN
8	LANC_DC
9	A_4.6V
10	SIRCS_SIG
11	NS_LED_K
12	NS_LED_A
13	XF_TALLY_LED
14	D_2.8V
15	MS_LED_ON
16	VREF1
17	VREF2
18	LIA1
19	LIA2
20	REG_GND
21	REG_GND
22	HP_L_OUT
23	REG_GND
24	HP_R_OUT
25	REG_GND
26	HP_JACK_IN
27	AU_2.8V
28	ZOOM_MIC_CONT
29	MIC_MONO
30	MIC_IN
31	SHOE_MIC_L
32	MIC_GND(REG_GND)
33	MIC_L
34	MIC_GND(REG_GND)
35	MIC_R
36	MIC_GND(REG_GND)
37	N.C.

XS_JACK_IN
S_C_I/O
S_Y_I/O
LANC_SIG
XLANC_JACK_IN
LANC_DC
VREF1
VREF2
LIA1
LIA2
HP_L_OUT
HP_R_OUT
HP_JACK_IN
ZOOM_MIC_CONT
MIC_MONO
MIC_IN
SHOE_MIC_L
MIC_L
MIC_R

TO
VA-118 BOARD(3/5)
CN4002
(THROUGH THE FP-621 FLEXIBLE)
(PAGE 4-15)

MIC_R
REG_GND
MIC_L
REG_GND
SHOE_MIC_L
MIC_IN
MIC_MONO
ZOOM_MIC_CONT
AU_2.8V

1 (1/2)

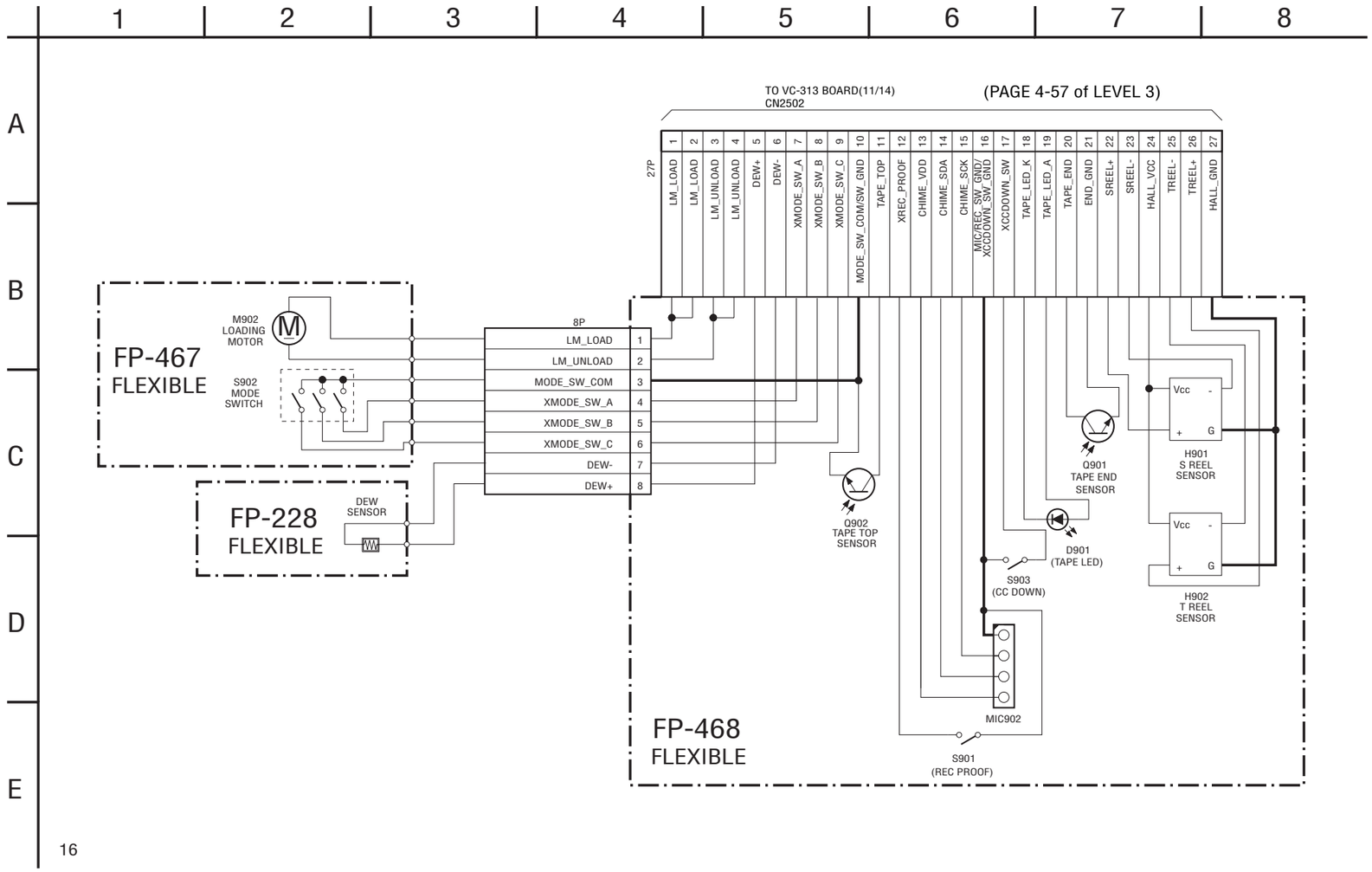
SIGNAL PATH

	VIDEO SIGNAL			AUDIO SIGNAL
	CHROMA	Y	Y/CHROMA	
REC	➡	⇉		➡
PB	⇨	⇉		⇨

16

For Schematic Diagram

• Refer to page 4-71 for flexible wiring board.



Schematic diagram of the VC-313 board are not shown.
Pages from 4-37 to 4-64 are not shown.

COVER

4-3. PRINTED WIRING BOARDS

Link

- CD-431 BOARD
- VA-118 BOARD (SIDE B)
- LB-085 BOARD
- CK-129 BOARD
- FP-626 FLEXIBLE BOARD
- PD-188 BOARD
- FP-467/468/228 FLEXIBLE (MD BLOCK)
- JK-242 BOARD
- VA-118 BOARD (SIDE A)
- MA-421 BOARD

- COMMON NOTE FOR PRINTED WIRING BOARDS
- WAVEFORMS
- MOUNTED PARTS LOCATION
- CIRCUIT BOARDS LOCATION
- FLEXIBLE BOARDS LOCATION

COVER

4-3. PRINTED WIRING BOARDS

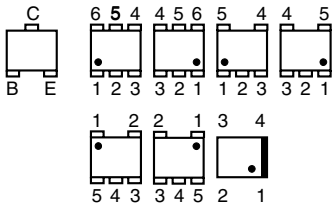
THIS NOTE IS COMMON FOR WIRING BOARDS
(In addition to this, the necessary note is printed in each block)

(For printed wiring boards)

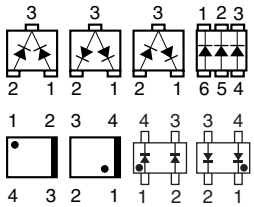
- : Uses unleaded solder.
- : Pattern from the side which enables seeing. (The other layers' patterns are not indicated)
- Through hole is omitted.
- Circled numbers refer to waveforms.
- There are a few cases that the part printed on diagram isn't mounted in this model.
- : panel designation

- Chip parts.

Transistor



Diode



BOARD INFORMATION

board name	parts location (shown on page)	waveform (shown on page)	pattern		CSP IC
			number of layers	layers not shown	
CD-431	4-93	4-89	6	2 to 5	–
LB-085	4-93	–	6	2 to 5	–
FP-626 FLEXIBLE	–	–	1	–	–
VA-118	4-93	4-89	6	2 to 5	–
CK-129	4-94	–	6	2 to 5	–
PD-188	4-94	4-90	6	2 to 5	–
JK-242	4-94	–	6	2 to 5	–
MA-421	4-94	–	6	2 to 5	–
VC-313	4-95	4-91,4-92	8	2 to 7	IC1601, 2101, 2103, 2201, 2301, 2601, 2704, 2803

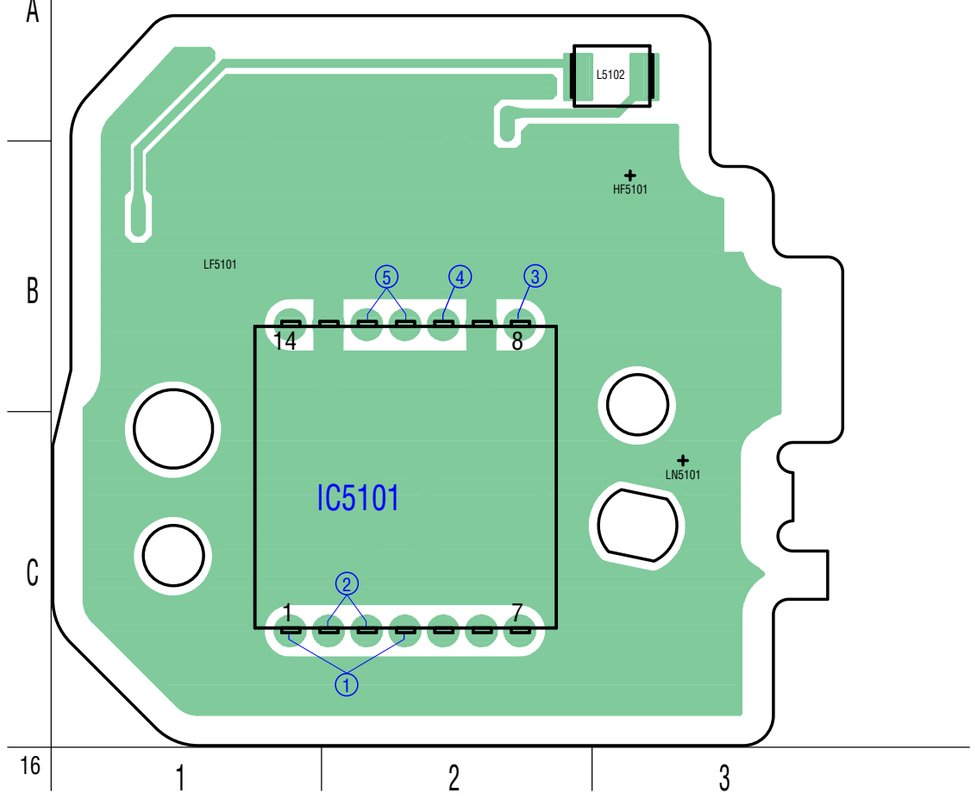
4-3. PRINTED WIRING BOARDS

CD-431 (CCD IMAGER) PRINTED WIRING BOARD

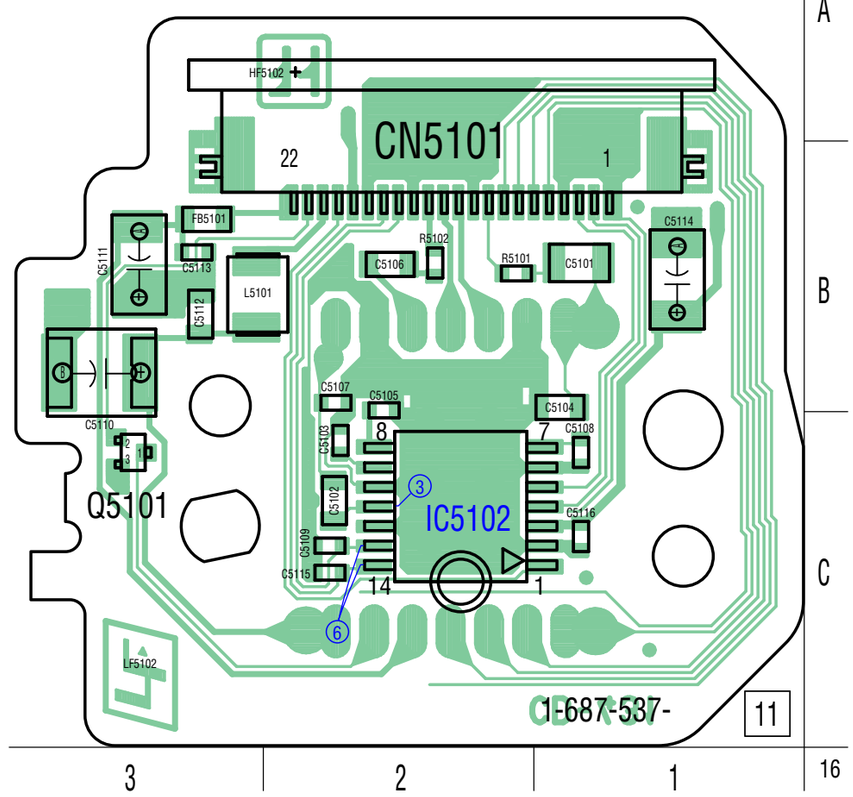
• Refer to page 4-65 for common note for printed wiring board.

• : Uses unleaded solder.

CD-431 BOARD(SIDE A)



CD-431 BOARD(SIDE B)

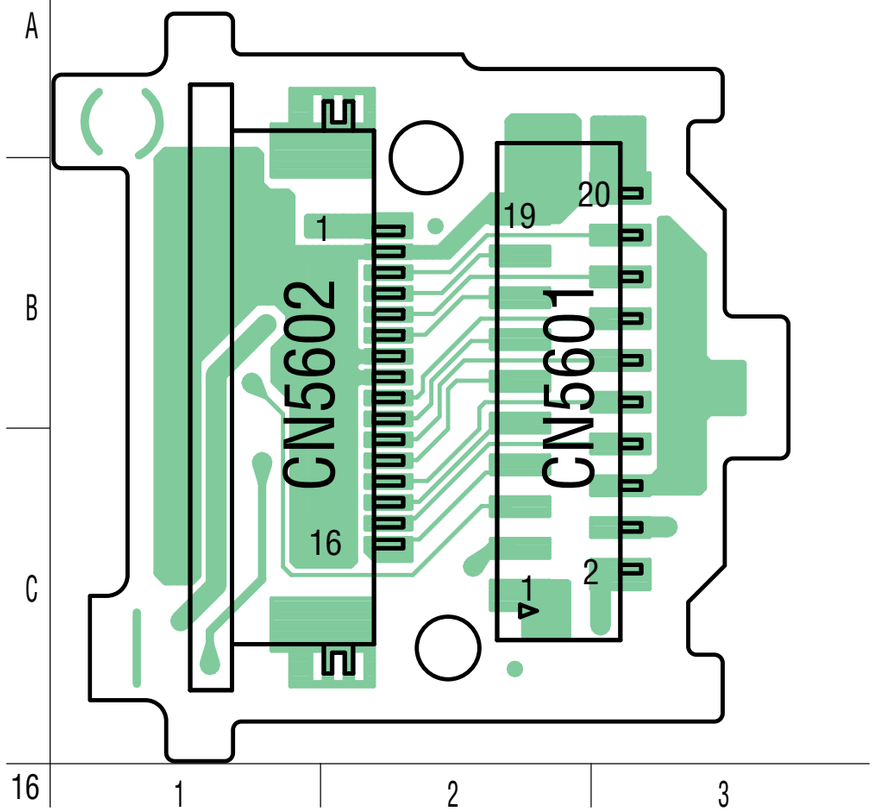


LB-085 (EVF, BACK LIGHT) PRINTED WIRING BOARD

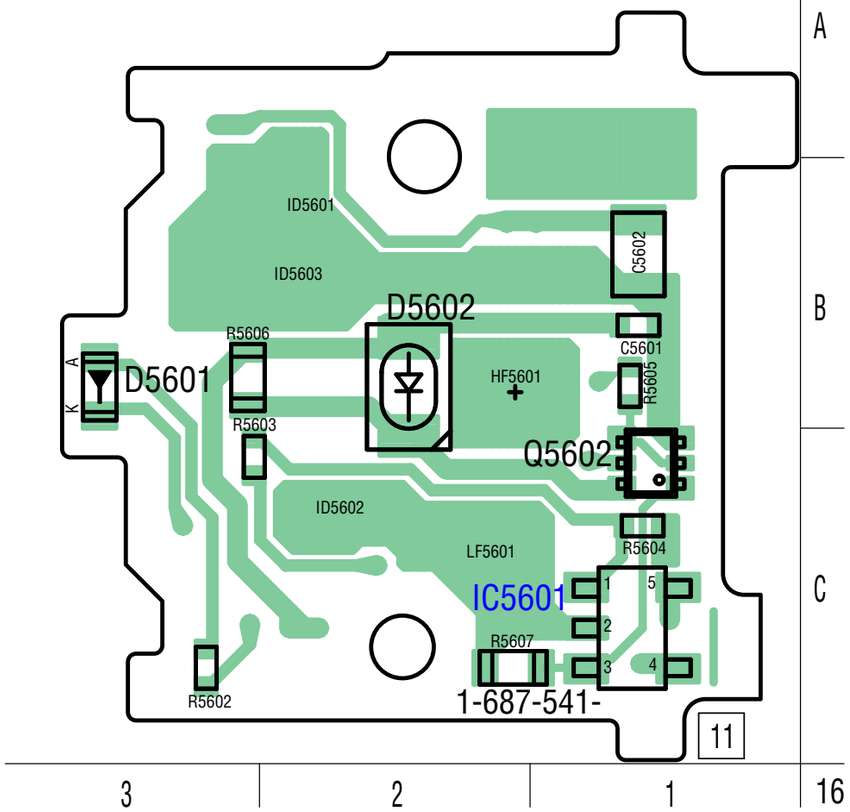
• Refer to page 4-65 for common note for printed wiring board.

• : Uses unleaded solder.

LB-085 BOARD (SIDE A)



LB-085 BOARD (SIDE B)

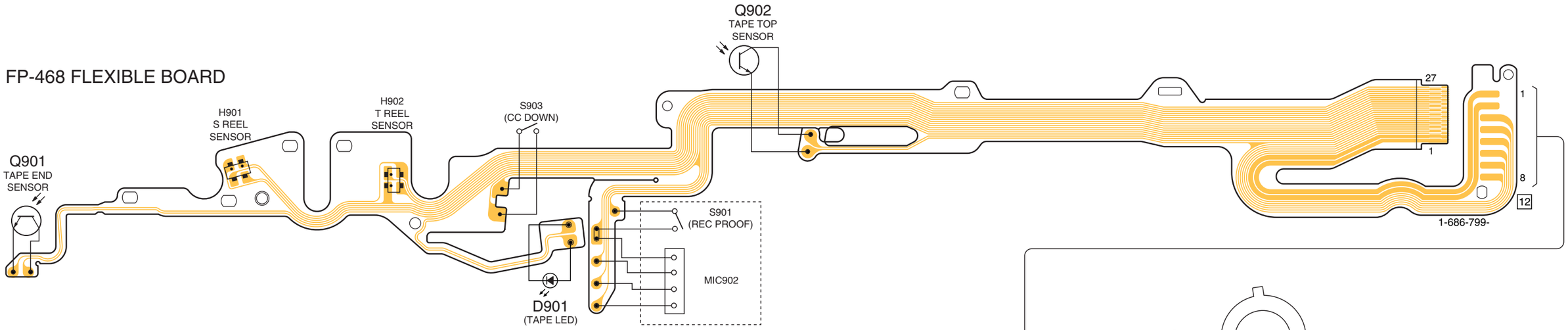


FP-467/468/228 FLEXIBLE WIRING BOARD (MD BLOCK)
FP-626 FLEXIBLE WIRING BOARD

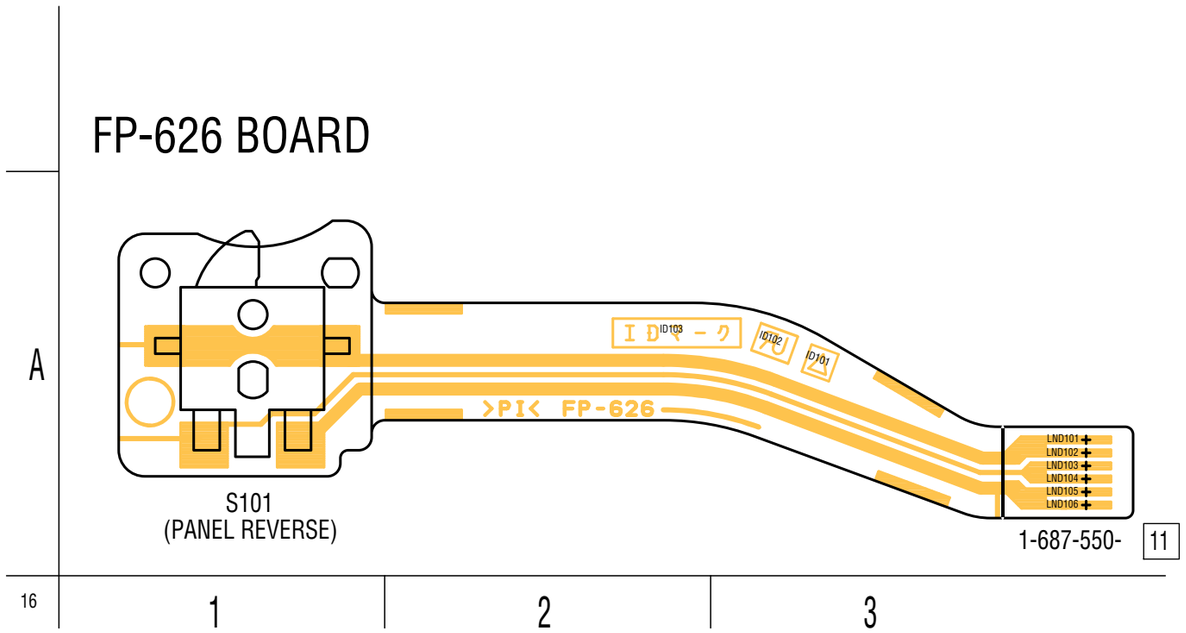
• Refer to page 4-65 for common note for printed wiring board.

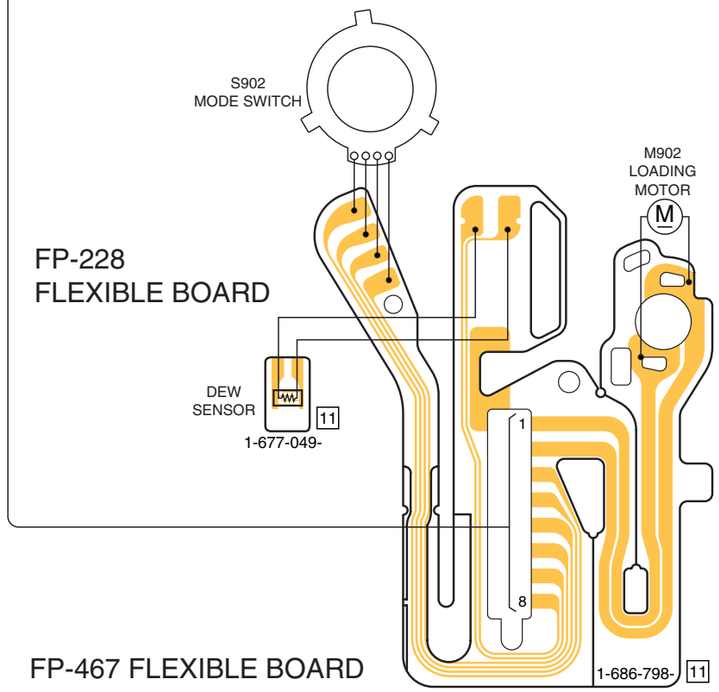
• : Uses unleaded solder.

FP-468 FLEXIBLE BOARD



FP-626 BOARD



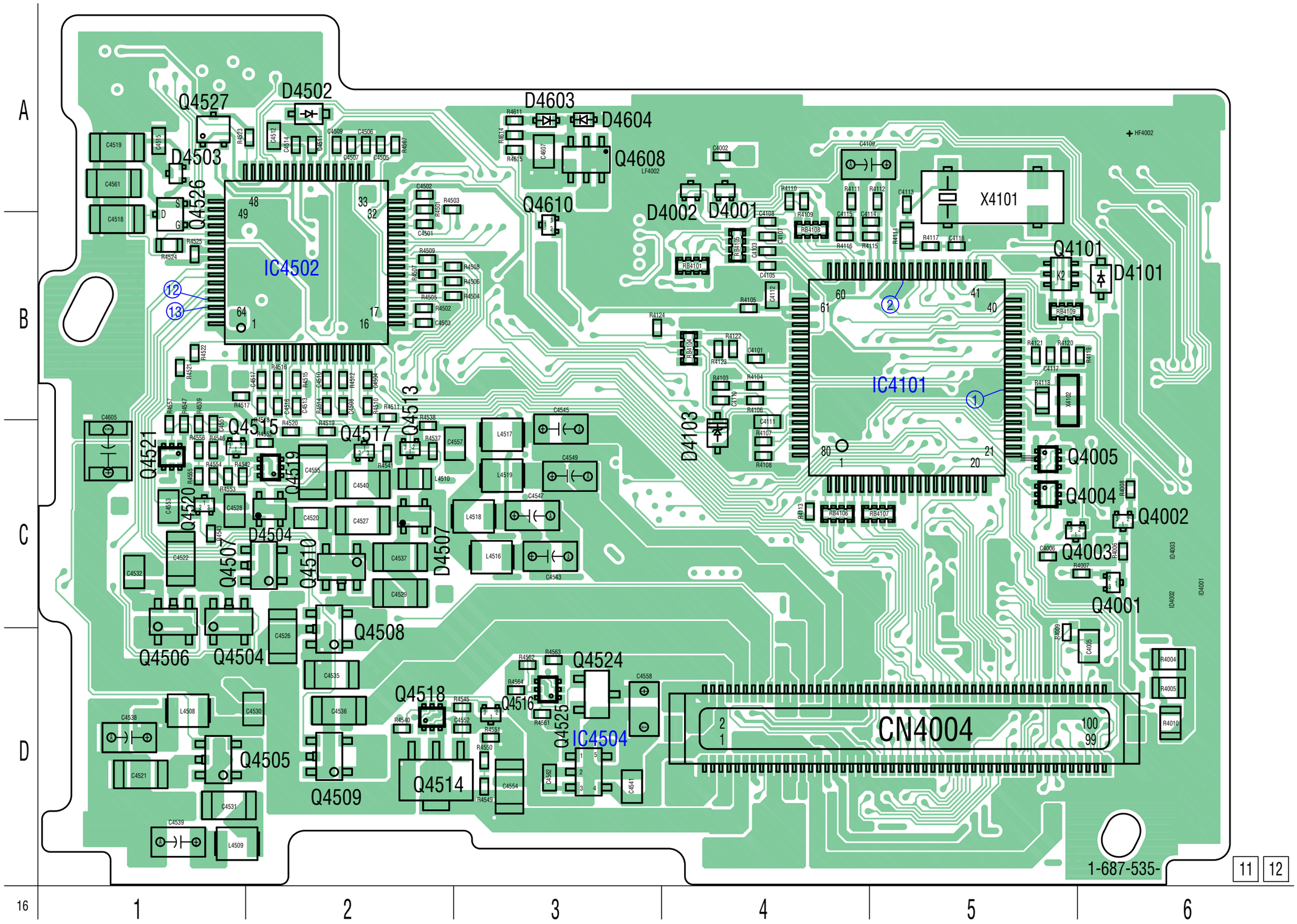


VA-118 (RGB DRIVE, TG, HI CONTROL, Y/P SENSOR AMP, CONNECTOR, DC/DC COVERTER, POWER IN, CHARGE) PRINTED WIRING BOARD

• Refer to page 4-65 for common note for printed wiring board.

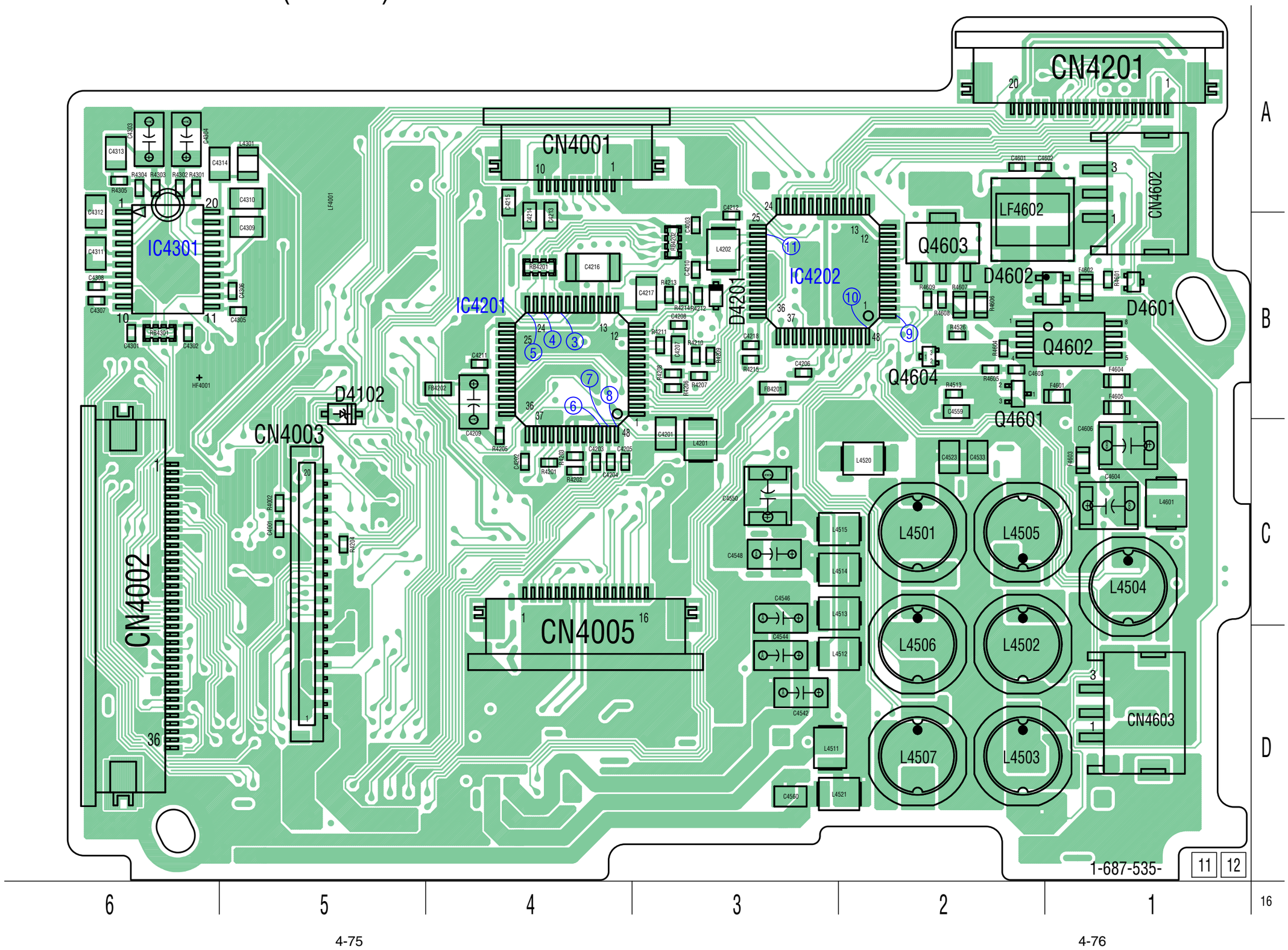
• : Uses unleaded solder.

VA-118 BOARD(SIDE A)



- : Uses unleaded solder.

VA-118 BOARD(SIDE B)

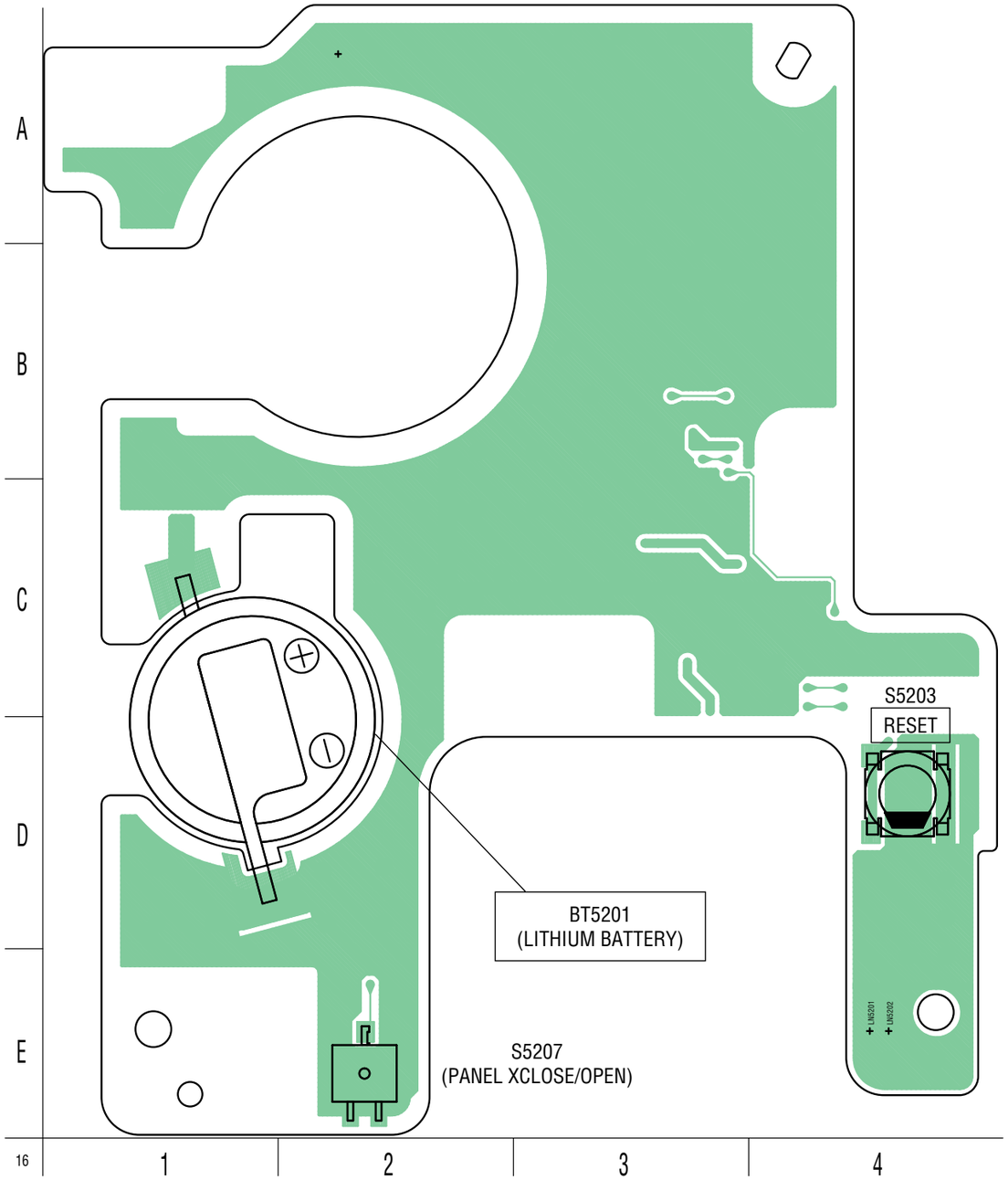


CK-129 (FUNCTION SWITCH) PRINTED WIRING BOARD

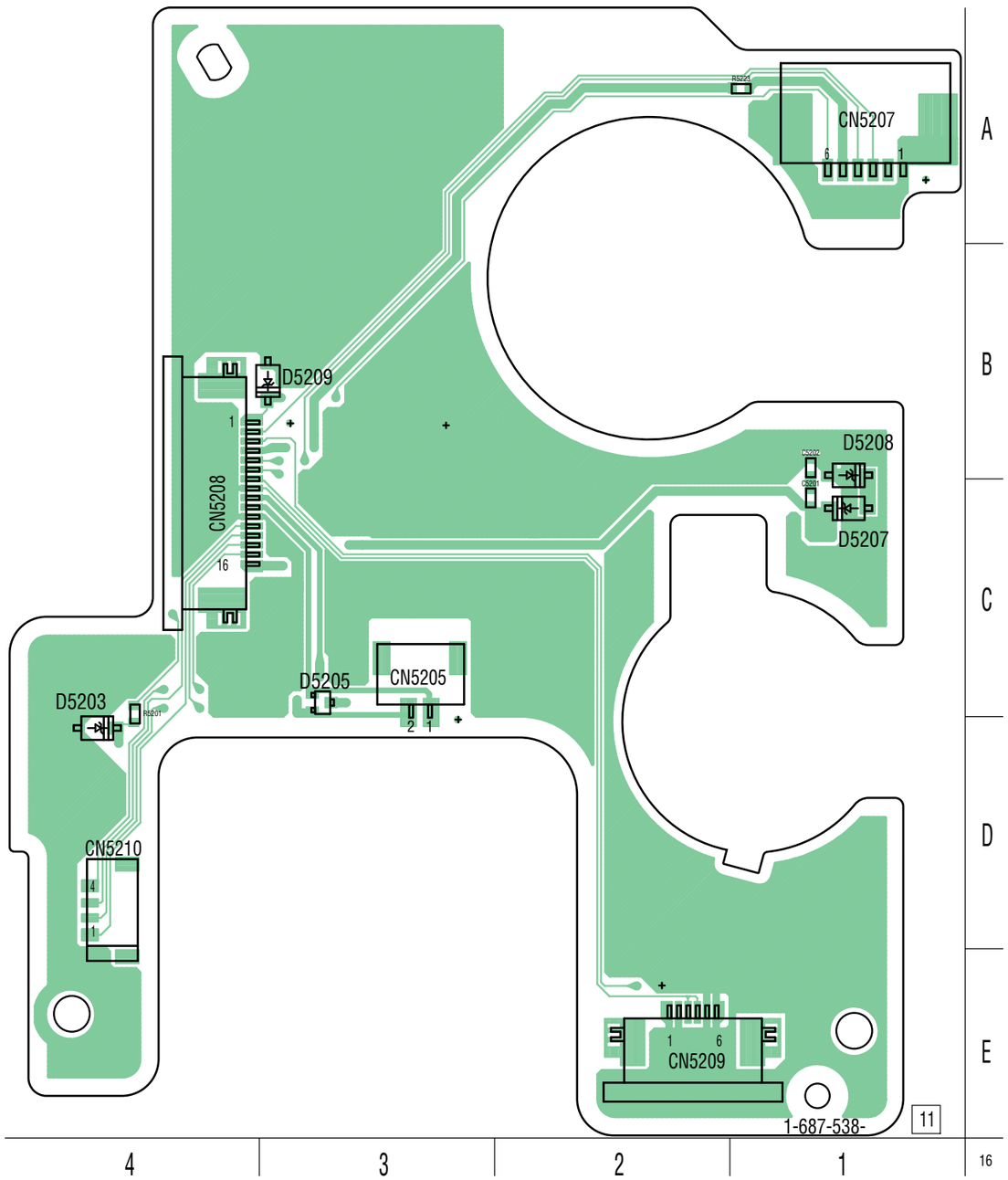
• Refer to page 4-65 for common note for printed wiring board.

• : Uses unleaded solder.

CK-129 BOARD(SIDE A)



CK-129 BOARD(SIDE B)



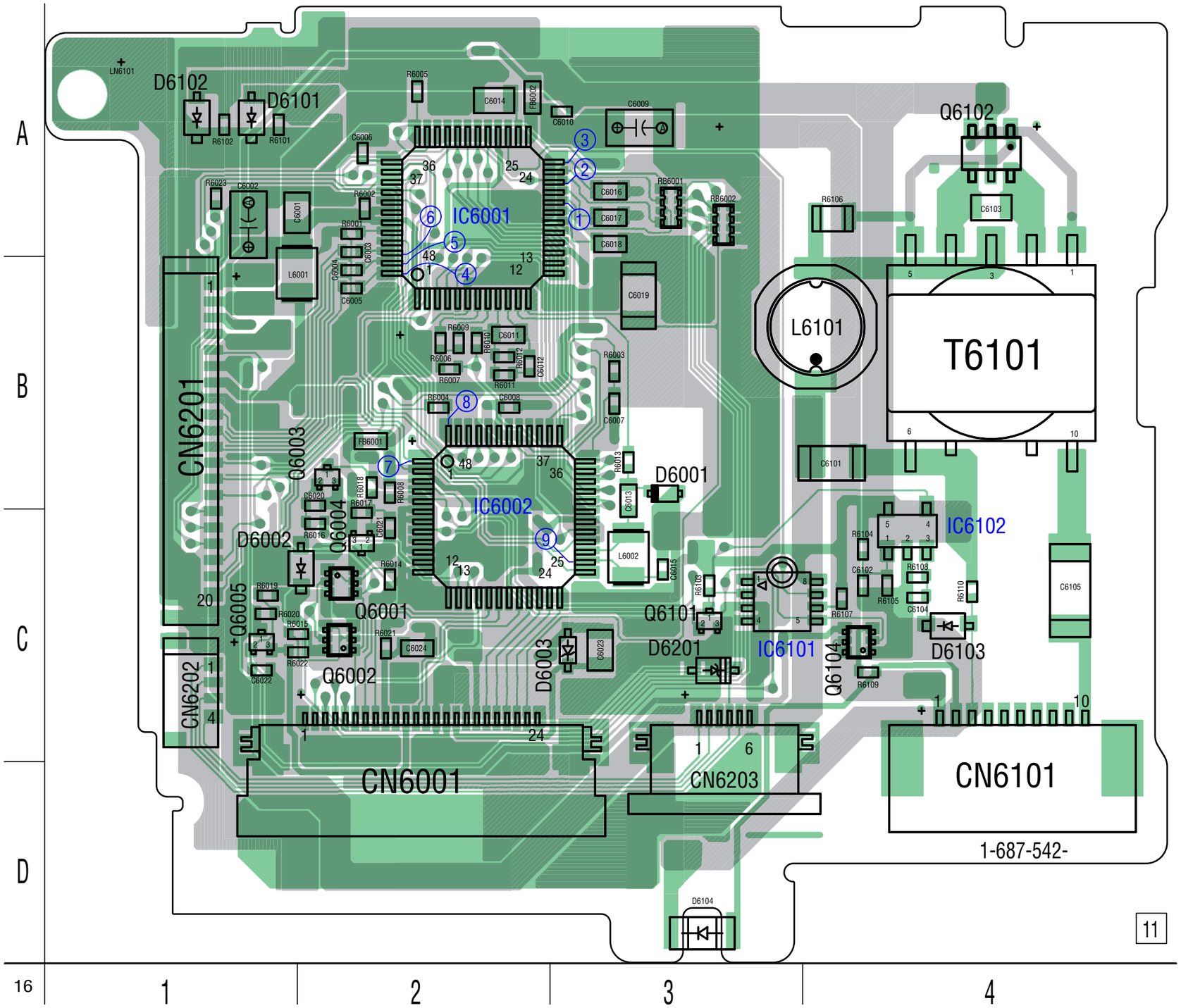
CAUTION :
Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type.

PD-188 (DRIVER, TG, BACKLIGHT DRIVE) PRINTED WIRING BOARD

• Refer to page 4-65 for common note for printed wiring board.

• : Uses unleaded solder.

PD-188 BOARD

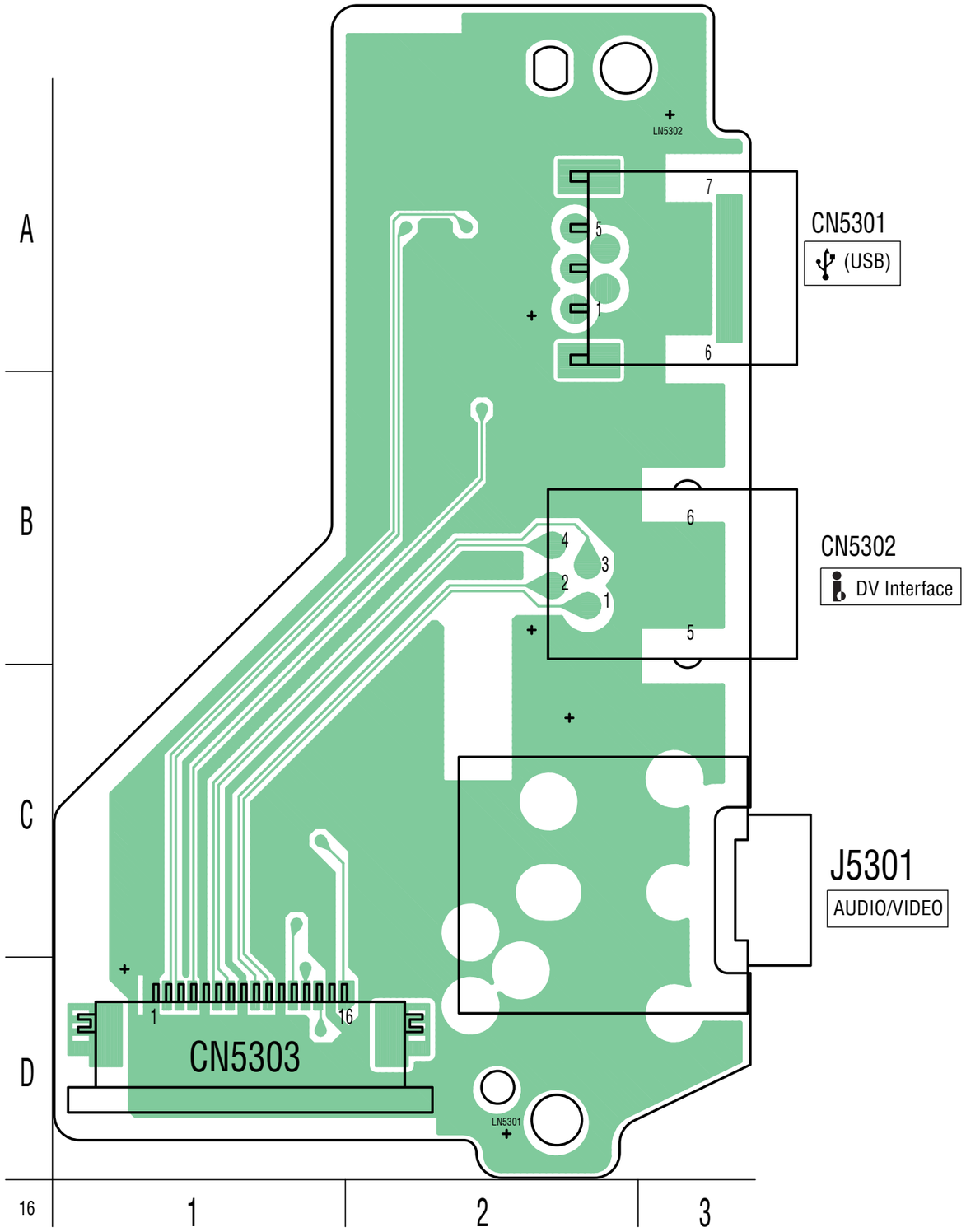


JK-242 (A.V/DV IN/OUT) PRINTED WIRING BOARD

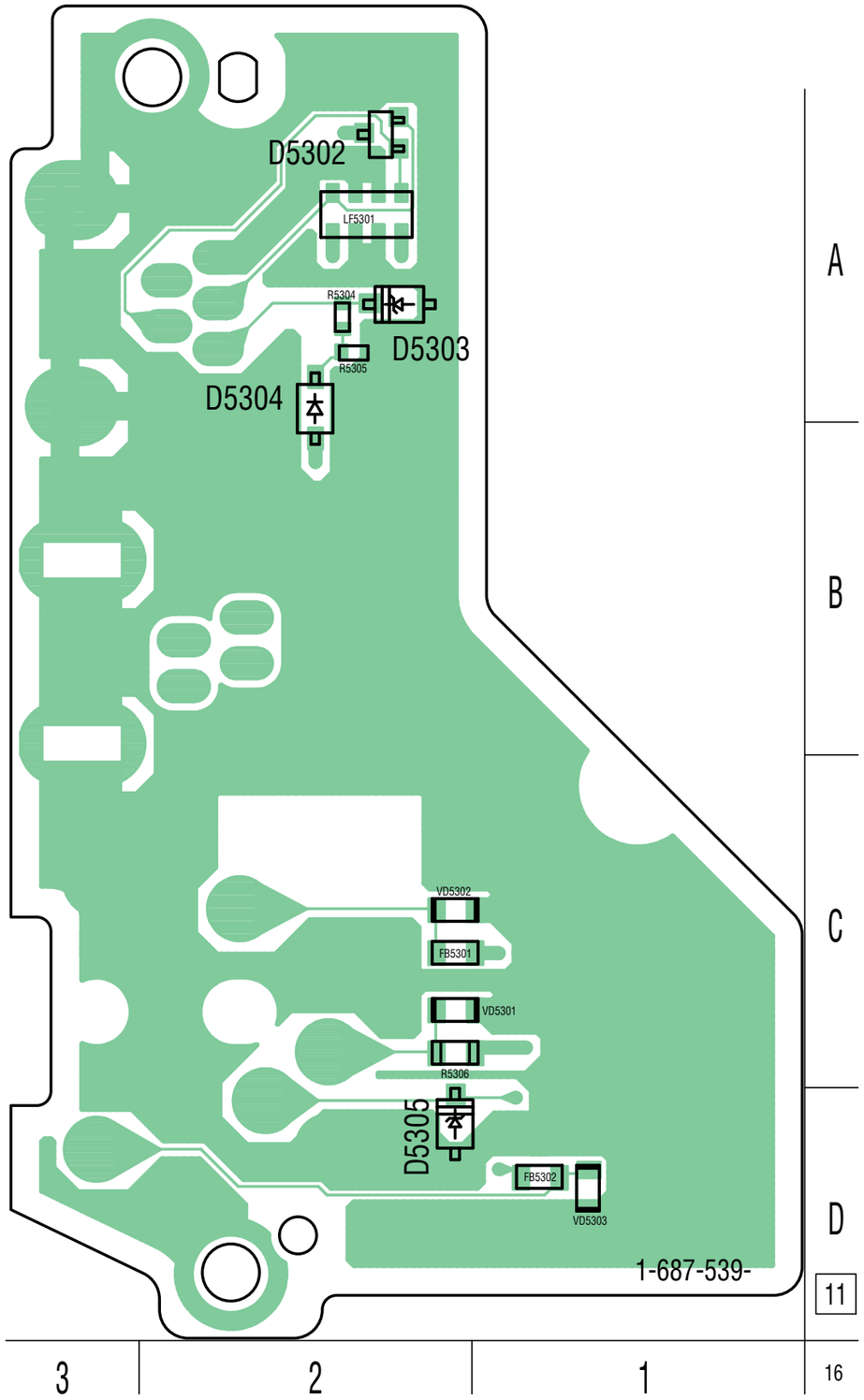
• Refer to page 4-65 for common note for printed wiring board.

• : Uses unleaded solder.

JK-242 BOARD(SIDE A)



JK-242 BOARD(SIDE B)

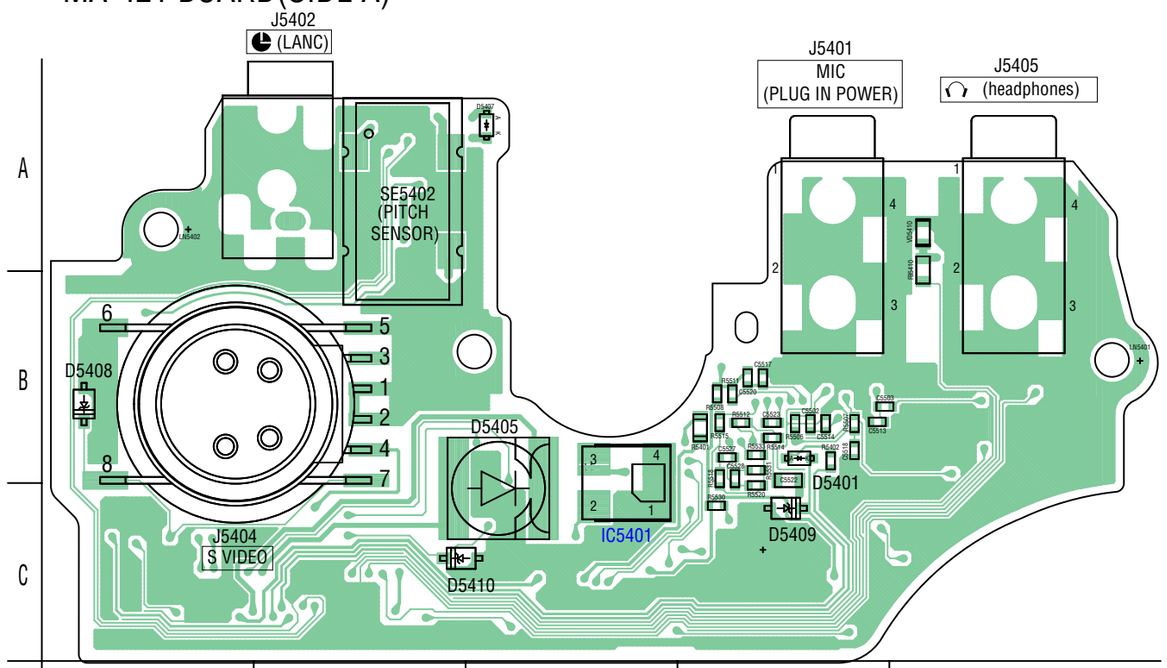


MA-421 (MIC AMP, Y/P SENSOR, V/A IN/OUT) PRINTED WIRING BOARD

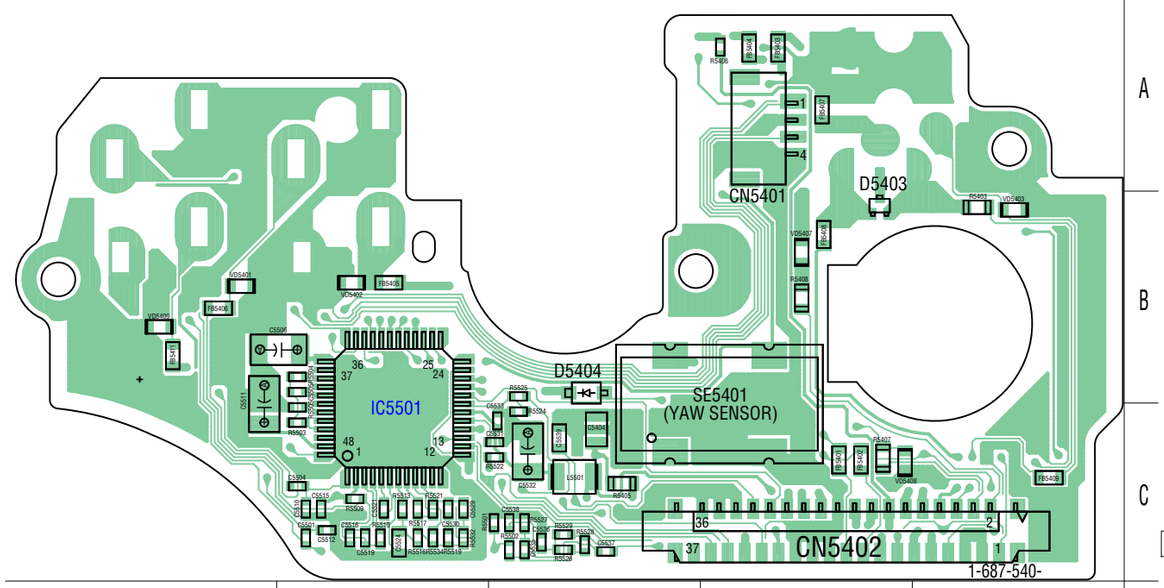
• Refer to page 4-65 for common note for printed wiring board.

• : Uses unleaded solder.

MA-421 BOARD(SIDE A)



MA-421 BOARD(SIDE B)

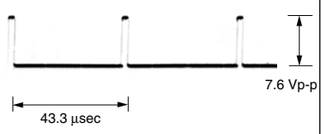


Printed wiring board of the VC-313 board are not shown.
Pages from 4-85 to 4-88 are not shown.

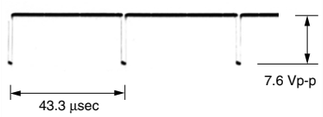
4-4. WAVEFORMS

CD-431 BOARD CAMERA REC

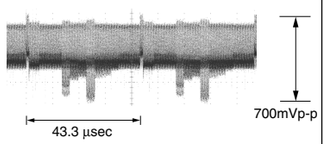
① IC5101 ①,④



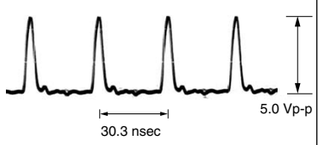
② IC5101 ②,③



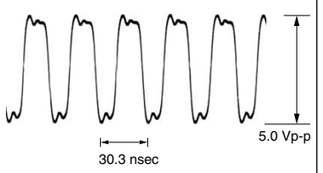
③ IC5101 ⑧,IC5102 ⑪



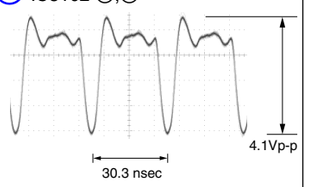
④ IC5101 ⑩



⑤ IC5101 ⑪,⑫

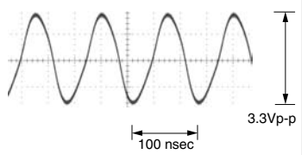


⑥ IC5102 ⑬,⑭

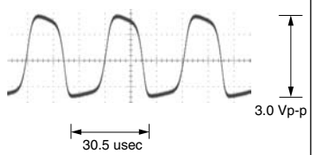


VA-118 BOARD

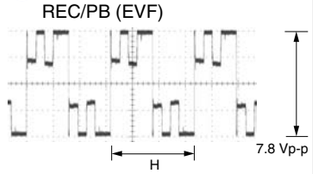
① IC4101 ㉙
REC/PB



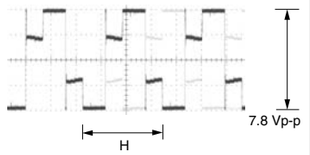
② IC4101 ㊶
REC/PB



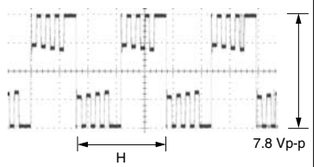
③ IC4201 ⑳
REC/PB (EVF)



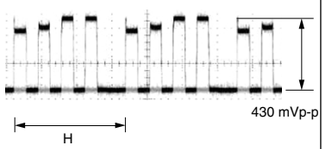
④ IC4201 ㉒
REC/PB (EVF)



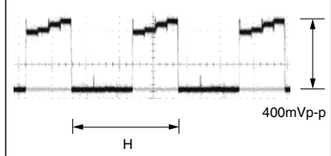
⑤ IC4201 ㉔
REC/PB (EVF)



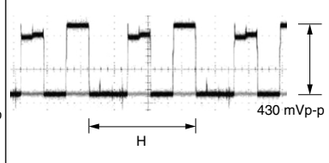
⑥ IC4201 ㊻
REC/PB (EVF)



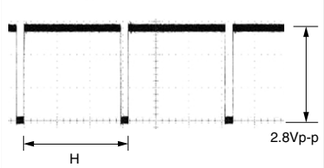
⑦ IC4201 ㊼
REC/PB (EVF)



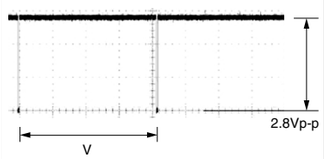
⑧ IC4201 ㊽
REC/PB (EVF)



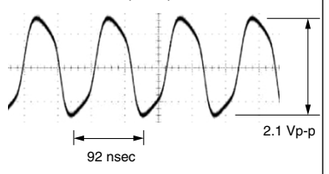
⑨ IC4202 ①
REC/PB



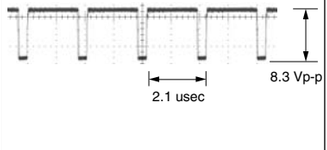
⑩ IC4202 ㊽
REC/PB



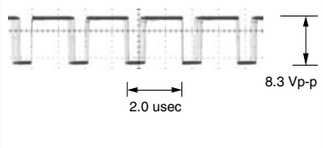
⑪ IC4202 ㉖
REC/PB (EVF)



⑫ IC4501 ㊶
REC/PB

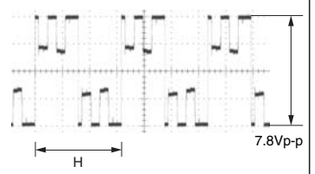


⑬ IC4502 ㊷
REC/PB

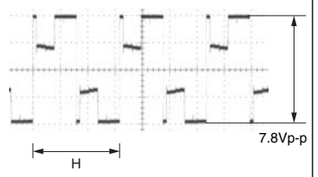


PD-188 BOARD REC/PB

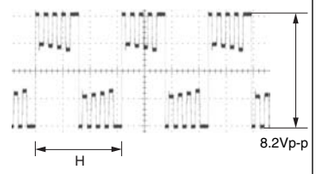
① IC6001 ⑳



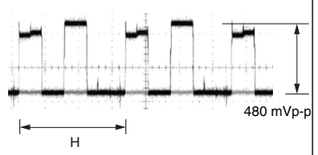
② IC6001 ㉒



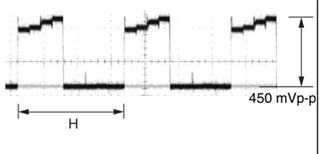
③ IC6001 ㉔



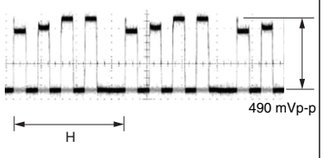
④ IC6001 ㊽



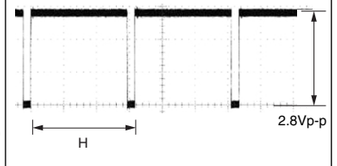
⑤ IC6001 ㊼



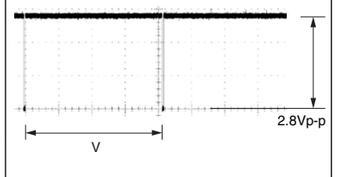
⑥ IC6001 ㊻



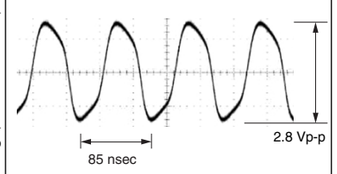
⑦ IC6002 ①



⑧ IC6002 ㊽



⑨ IC6002 ㉖



Waveforms of the VC-313 board are not shown.
Pages 4-91 and 4-92 are not shown.

4-5. MOUNTED PARTS LOCATION

no mark : side A
* mark : side B

CD-431 BOARD

* C5101 B-1
* C5102 C-2
* C5103 C-2
* C5104 B-1
* C5105 B-2
* C5106 B-2
* C5107 B-2
* C5108 C-1
* C5109 C-2
* C5110 B-3
* C5111 B-3
* C5112 B-3
* C5113 B-3
* C5114 B-1
* C5115 C-2
* C5116 C-1

* CN5101 B-2

* FB5101 B-2

IC5101 C-2
* IC5102 C-2

* L5101 B-3
L5102 A-3

* Q5101 C-3

* R5101 B-1
* R5102 B-2

LB-085 BOARD

* C5601 B-1
* C5602 B-1

CN5601 B-2
CN5602 A-1

* D5601 B-3
* D5602 B-2

* IC5601 C-1

* Q5602 C-1

* R5602 C-3
* R5603 C-3
* R5604 C-1
* R5605 B-1
* R5606 B-3
* R5607 C-2

VA-118 BOARD

* C4001 C-5
C4002 A-4
* C4003 A-3
C4005 C-6
C4006 C-5
C4101 B-4
C4103 B-4
C4105 B-4
C4107 B-4
C4108 A-4
C4109 A-5
C4110 B-4
C4111 B-4
C4112 B-4
C4113 A-5
C4114 A-5
C4115 A-4
C4116 B-5
C4117 B-5
* C4201 C-3
* C4202 C-4
* C4203 C-4
* C4204 C-4
* C4205 C-4
* C4206 B-3
* C4207 B-3
* C4208 B-3
* C4209 B-4
* C4210 B-3
* C4211 B-4
* C4212 A-3
* C4213 A-4
* C4214 A-4
* C4215 A-4
* C4216 B-4
* C4217 B-3
* C4218 B-3
* C4301 B-6
* C4302 B-6
* C4303 A-6
* C4304 A-6
* C4305 B-6
* C4306 B-6
* C4307 B-6
* C4308 B-6
* C4309 B-5
* C4310 A-5
* C4311 B-6
* C4312 A-6
* C4313 A-6
* C4314 A-6
C4501 A-2
C4502 A-2
C4503 B-2
C4504 B-2
C4505 A-2
C4506 A-2
C4507 A-2
C4508 B-2
C4509 A-2
C4510 B-2
C4511 A-2
C4512 A-2
C4513 B-2
C4514 A-2
C4515 A-1
C4516 B-2
C4517 B-2
C4518 A-1
C4519 A-1
C4520 C-2
C4521 D-1
C4522 C-1
* C4523 C-2
C4526 C-2
C4527 C-2
C4528 C-1
C4529 C-2
C4530 D-2
C4531 D-1
C4532 C-1
* C4533 C-2
C4535 D-2
C4536 D-2
C4537 C-2
C4538 D-1
C4539 D-1
C4540 C-2
C4541 D-3
* C4542 D-3
C4543 C-3
* C4544 D-3
C4545 B-3
* C4546 C-3
C4547 C-3
* C4548 C-3
C4549 C-3
* C4550 C-3
C4551 B-1
C4552 D-3
C4553 C-1
C4554 D-3
C4555 C-2
C4557 C-3
C4558 D-3
* C4559 B-2
* C4560 D-3
C4561 A-1
C4562 D-3
* C4601 B-2
* C4602 A-2
* C4603 B-2
* C4604 C-1
C4605 C-1
* C4606 C-1
C4607 A-3

* CN4001 A-4
* CN4002 C-6
* CN4003 C-5
CN4004 D-5
* CN4005 D-4
* CN4201 A-1
* CN4602 A-1
* CN4603 D-1

D4001 A-4
D4002 A-4
D4101 B-6
D4102 B-5
D4103 C-4
* D4201 B-3
D4502 A-2
D4503 A-1
D4504 C-2
D4507 C-2
* D4601 B-1
* D4602 B-1
D4603 A-3
D4604 A-3

* F4601 B-1
* F4602 B-1
* F4603 C-1
* F4604 B-1
* F4605 B-1

* FB4201 B-3
* FB4202 B-4

IC4101 B-5
* IC4201 B-4
* IC4202 B-3
* IC4301 B-6
IC4502 B-2
IC4504 D-3

* L4201 C-3
* L4202 B-3
* L4301 A-5
* L4501 C-2
* L4502 D-2
* L4503 D-2
* L4504 C-1
* L4505 C-2
* L4506 D-2
* L4507 D-2
L4508 D-1
L4509 D-1
L4510 C-2
* L4511 D-3
* L4512 D-3
* L4513 C-3
* L4514 C-3
* L4515 C-3
L4516 C-3
L4517 C-3
L4518 C-3
L4519 C-3
* L4520 C-2
* L4521 D-3
* L4601 C-1

* LF4601 A-2

Q4001 C-6
Q4002 C-6
Q4003 C-5
Q4004 C-5
Q4005 C-5
Q4101 B-6
Q4504 C-1
Q4505 D-1
Q4506 C-1
Q4507 C-1
Q4508 C-2
Q4509 D-2
Q4510 C-2
Q4513 C-2
Q4514 D-2
Q4515 C-1
Q4516 D-3
Q4517 C-2
Q4518 D-2
Q4519 C-2
Q4520 C-1
Q4521 C-1
Q4524 D-3
Q4525 D-3
Q4526 A-1
Q4527 A-1
* Q4601 B-2
* Q4602 B-1
* Q4603 B-2
* Q4604 B-2
Q4608 A-3
Q4610 A-3

* R4002 C-5
R4004 D-6
R4005 D-6
R4006 C-6
R4007 C-6
R4008 C-6
R4009 C-6
R4010 D-6
R4103 B-4
R4104 B-4
R4105 B-4
R4106 B-4
R4107 C-4
R4108 C-4
R4109 A-4
R4110 A-4
R4111 A-5
R4112 A-5
R4113 C-4
R4114 A-5
R4115 A-5
R4116 A-4
R4117 B-5
R4118 B-5
R4119 B-6
R4120 B-6
R4121 B-5
R4122 B-4
R4123 B-4
R4124 B-4
* R4201 C-4
* R4202 C-4
* R4203 C-4
* R4204 C-5
* R4205 C-4
* R4206 B-3
* R4207 B-3
* R4208 B-3
* R4209 B-3
* R4210 B-3
* R4211 B-3
* R4212 B-3
* R4213 B-3
* R4214 B-3
* R4215 B-3
* R4301 A-6
* R4302 A-6
* R4303 A-6
* R4304 A-6
* R4305 A-6
R4501 A-2
R4502 B-2
R4503 A-3
R4504 B-3
R4505 B-2
R4506 B-3
R4507 B-2
R4508 B-3
R4509 B-2
R4510 B-2
R4511 B-2
R4512 B-2
* R4513 B-2
R4514 B-2
R4515 B-2
R4516 B-2
R4517 B-1
R4518 B-2
R4519 B-2
R4520 B-2
R4521 B-1
R4522 B-1
R4523 A-2
R4524 B-1
R4525 B-1
* R4526 B-2
R4537 C-2
R4538 B-2
R4539 B-1
R4540 D-2
R4541 C-2
R4542 C-2
R4543 C-1
R4545 D-3
R4546 C-1
R4547 B-1
R4549 D-3
R4550 D-3
R4551 D-3
R4552 C-2
R4553 C-1
R4554 C-1
R4555 C-1
R4556 C-1
R4557 B-1
R4561 D-3
R4562 D-3
R4563 D-3
R4564 D-3
R4565 D-4
R4566 D-1
R4567 A-2
* R4601 B-1
* R4602 A-2
* R4603 B-2
* R4604 B-2
* R4605 B-2
* R4606 B-2
* R4607 B-2
* R4608 B-2
* R4609 B-2
R4611 A-3
* R4613 A-2
R4614 A-3
R4615 A-3

RB4101 B-4
RB4104 B-4
RB4105 B-4
RB4106 C-4
RB4107 C-5
RB4108 A-4
RB4109 B-6
* RB4201 B-4
* RB4202 B-3
* RB4301 B-6

X4101 A-5
X4102 B-6

COVER

4-3. PRINTED WIRING BOARDS

no mark : side A
* mark : side B

CK-129 BOARD

* BT5201 C-1

* C5201 C-1
* C5202 B-1

* CN5205 C-3
* CN5207 A-1
* CN5208 C-4
* CN5209 E-2
* CN5210 D-4

* D5203 D-4
* D5205 C-3
* D5207 C-1
* D5208 B-1
* D5209 B-3

* R5201 D-4
* R5223 A-1

S5203 D-4
S5207 E-2

PD-188 BOARD

C6001 A-2
C6002 A-1
C6003 A-2
C6004 B-2
C6005 B-2
C6006 A-2
C6007 B-3
C6008 B-2
C6009 A-3
C6010 A-3
C6011 B-2
C6012 B-2
C6013 B-3
C6014 A-2
C6015 C-3
C6016 A-3
C6017 A-3
C6018 A-3
C6019 B-3
C6020 B-2
C6021 C-2
C6022 C-1
C6023 C-3
C6024 C-2
C6101 B-4
C6102 C-4
C6103 A-4
C6104 C-4
C6105 C-4

CN6001 D-2
CN6101 D-4
CN6201 B-1
CN6202 C-1
CN6203 D-3

D6001 B-3
D6002 C-2
D6003 C-3
D6101 A-1
D6102 A-1
D6103 C-4
D6104 D-3

FB6001 B-2
FB6002 A-2

IC6001 A-2
IC6002 C-2
IC6101 C-3
IC6102 C-4

L6001 B-2
L6002 C-3
L6101 B-4

Q6001 C-2
Q6002 C-2
Q6003 B-2
Q6004 C-2
Q6005 C-1
Q6101 C-3
Q6102 A-4
Q6103 A-4
Q6104 C-4

R6001 A-2
R6002 A-2
R6003 B-3
R6004 B-2
R6005 A-2
R6006 B-2
R6007 B-2
R6008 B-2
R6009 B-2
R6010 B-2
R6011 B-2
R6012 B-2
R6013 B-3
R6014 C-2
R6015 C-2
R6016 C-2
R6017 C-2
R6018 B-2
R6019 C-1
R6020 C-1
R6021 C-2
R6022 C-2
R6023 A-1
R6101 A-1
R6102 A-1
R6103 C-3
R6104 C-4
R6105 C-4
R6106 A-4
R6107 C-4
R6108 C-4
R6109 C-4
R6110 C-4

RB6001 A-3
RB6002 A-3

T6101 B-4

JK-242 BOARD

CN5301 A-3
CN5302 B-3
CN5303 D-1

* D5302 A-2
* D5303 A-2
* D5304 B-2
* D5305 D-1

* FB5301 C-1
* FB5302 D-1

J5301 C-2

* LF5301 A-2

* R5304 A-2
* R5305 A-2
* R5306 C-1

* VD5301 C-1
* VD5302 C-1
* VD5303 D-1

MA-421 BOARD

C5402 B-4
* C5404 C-3
* C5501 C-4
C5502 B-4
C5503 B-4
* C5504 C-4
* C5505 B-4
* C5506 B-4
* C5510 C-4
* C5511 B-5
* C5512 C-4
C5513 B-4
C5514 B-4
* C5515 C-4
* C5516 C-4
C5517 B-4
C5518 B-4
* C5519 C-4
C5520 B-4
* C5521 C-4
C5522 B-4
C5523 B-4
* C5524 C-4
C5527 B-4
C5528 B-4
* C5529 C-4
* C5530 C-4
* C5531 C-3
* C5532 C-3
* C5533 B-3
* C5535 C-3
* C5536 C-3
* C5537 C-3
* C5538 C-3
* C5539 C-3

* CN5401 A-2
* CN5402 C-2

D5401 B-4
* D5403 B-2
* D5404 B-3
D5405 C-3
D5407 A-3
D5408 B-1
D5409 C-4

* FB5401 C-2
* FB5402 C-2
* FB5403 A-2
* FB5404 A-2
* FB5405 B-4
* FB5406 B-5
* FB5407 A-2
* FB5408 B-2
* FB5409 C-1
FB5410 A-5
* FB5411 B-5

IC5401 C-3
* IC5501 C-4

J5401 A-4
J5402 A-2
J5404 B-1
J5405 A-5

* L5501 C-3

R5401 B-4
R5402 B-4
* R5403 B-1
* R5405 C-3
* R5406 A-2
* R5407 C-2
* R5408 B-2
* R5501 C-3
* R5502 C-3
* R5503 C-4
* R5504 B-4
* R5505 C-4
R5506 B-4
R5507 B-4
R5508 B-4
* R5509 C-4
* R5510 C-4
R5511 B-4
R5512 B-4
* R5513 C-4
R5514 B-4
R5515 B-4
* R5516 C-4
* R5517 C-4
R5518 B-4
* R5519 C-4
R5520 C-4
* R5521 C-4
* R5522 C-3
* R5524 C-3
* R5525 B-3
* R5526 C-3
* R5527 C-3
* R5528 C-3
* R5529 C-3
R5530 C-4
R5531 B-4
* R5532 C-4
R5533 B-4
* R5534 C-4

* SE5401 C-2
SE5402 A-2

* VD5401 B-5
* VD5402 B-4
* VD5403 B-1
* VD5407 B-2
* VD5408 C-2
* VD5409 B-5
VD5410 A-5

Mounted parts location of the VC-313 board is not shown.
Pages from 4-95 to 4-96 are not shown.

COVER

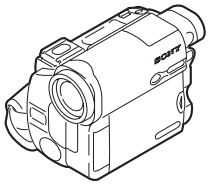
NOTE

5. REPAIR PARTS LIST

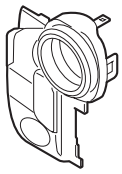
NOTE: Characters A to Z of the electrical parts list indicate location of exploded views in which the desired part is shown.

Link

EXPLODED VIEWS

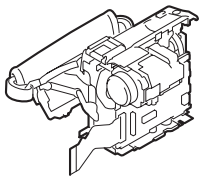


OVERALL SECTION



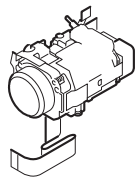
A

F PANEL SECTION



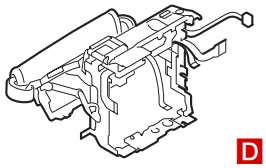
B

MAIN CHASSIS SECTION



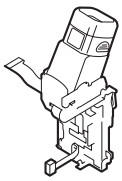
C

LENS SECTION



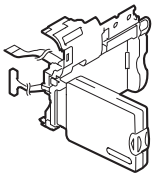
D

CABINET L SECTION



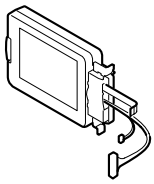
E

BT PANEL/EVF SECTION



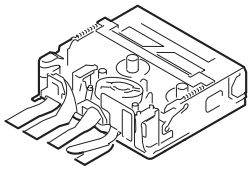
F

CABINET R SECTION

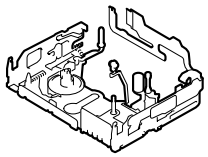


G

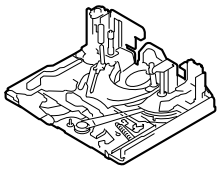
LCD SECTION



OVERALL (MECHANISM DECK-Z100)



LS CHASSIS BLOCK ASSEMBLY



MECHANICAL CHASSIS BLOCK ASSEMBLY

Link

ELECTRICAL PARTS LIST

ACCESSORIES

CD-431 BOARD C	JK-242 BOARD D	PD-188 BOARD G
CK-129 BOARD F	LB-085 BOARD E	VA-118 BOARD B
FP-626 FLEXIBLE BOARD G	MA-421 BOARD A	

COVER

5. REPAIR PARTS LIST

NOTE:

- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- CAPACITORS:
  uF: µF
- COILS
  uH: µH
- RESISTORS
  All resistors are in ohms.
  METAL: metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F: nonflammable
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA...: µA... , uPA... , µPA... ,
  uPB... , µPB... , uPC... , µPC... ,
  uPD..., µPD...
- Abbreviation
  CND : Canadian model
  AUS : Australian model
  EE : East European model
  NE : North European model
  JE : Tourist model
  CH : Chinese model
  KR : Korea model
  HK : Hong Kong model

When indicating parts by reference number, please include the board name.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

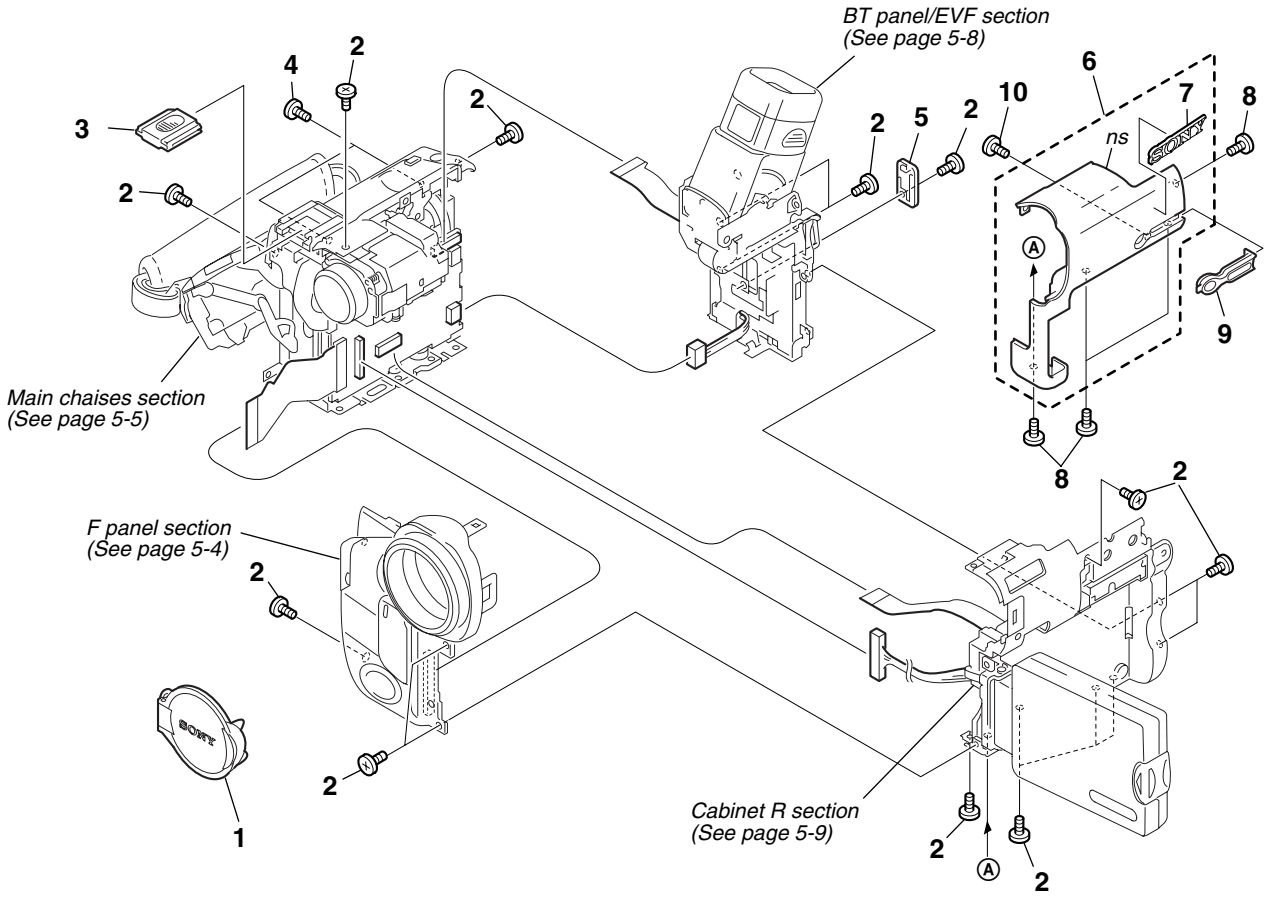
COVER

5. REPAIR PARTS LIST

5-1. EXPLODED VIEWS

5-1-1. OVERALL SECTION

ns : not supplied



Ref. No.	Part No.	Description
1	X-3953-088-1	CAP ASSY, LENS
2	3-989-735-81	SCREW (M1.7), LOCK ACE, P2
3	3-080-571-01	COVER, SHOE
4	3-056-030-81	SCREW (M1.7), LOCK ACE, P2
5	3-080-570-01	LID, CPC

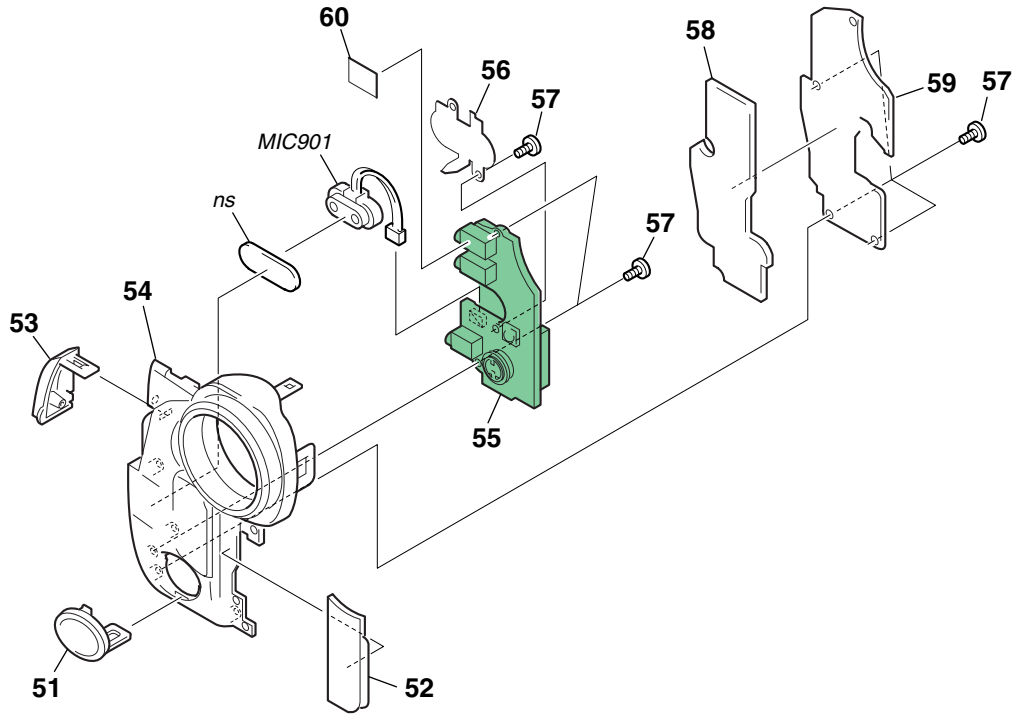
Ref. No.	Part No.	Description
6	X-3953-229-1	COVER (40E) ASSY, CABINET (R)
* 7	4-942-636-01	EMBLEM (NO.3.5), SONY
8	3-989-735-51	SCREW (M1.7), LOCK ACE, P2
9	3-080-421-11	BUTTON, CF
10	3-713-791-51	SCREW (M1.7X3.5), TAPPING, P2

COVER

5. REPAIR PARTS LIST

5-1-2. F PANEL SECTION

ns : not supplied



Ref. No.	Part No.	Description
51	3-080-516-01	COVER, S TERMINAL
52	3-081-242-01	PLATE (G), NAME (TRV33)
52	3-081-242-11	PLATE (G), NAME (TRV33E)
53	3-080-573-01	COVER (F), JACK
54	X-3953-214-1	PANEL (400) ASSY, F
55	A-7013-530-A	MA-421 (MSARI) BOARD, COMPLETE

Ref. No.	Part No.	Description
56	3-080-517-01	RETAINER, MICROPHONE
57	3-713-791-11	SCREW (M1.7X5), TAPPING, P2
58	3-080-519-01	CUSHION, MA COVER
59	3-080-514-01	COVER, MA
60	CAUTION	SHEET, HP
MIC901	1-542-513-11	MICROPHONE

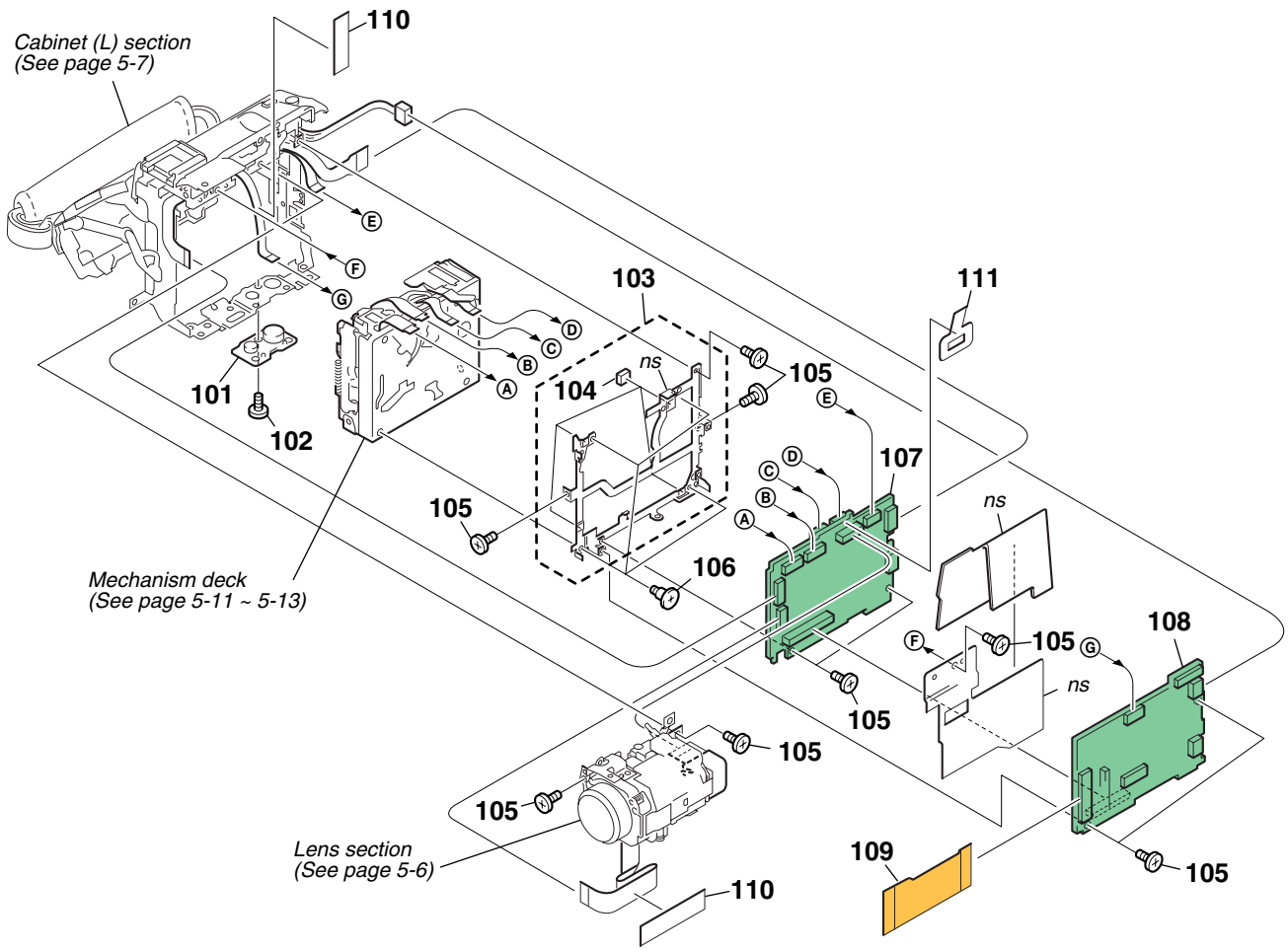
CAUTION :
For the parts of 60 : SHEET, HP (3-083-974-01) cut SHEET (MD), CN (3-075-957-02) into the desired length and use it.

COVER

5. REPAIR PARTS LIST

5-1-3. MAIN CHASSIS SECTION

ns : not supplied



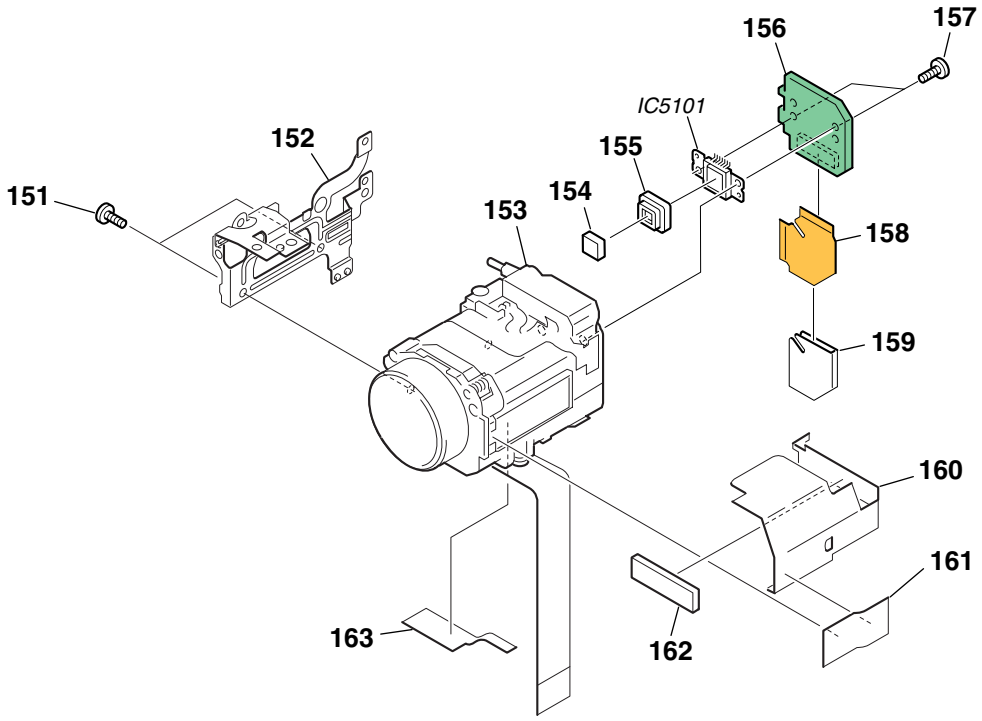
Ref. No.	Part No.	Description
101	3-080-569-01	SCREW
102	3-989-735-81	SCREW (M1.7), LOCK ACE, P2
103	X-3953-112-1	FRAME ASSY, MD
104	3-975-921-01	SHEET, VIBRATION PROOF
105	3-989-735-01	SCREW (M1.7), LOCK ACE, P2
106	3-062-214-01	SCREW (M1.4X1.5)

Ref. No.	Part No.	Description
107	A-7016-142-A	VC-313 (NT) BOARD, COMPLET (SERVICE) (TRV33)
107	A-7016-330-A	VC-313 (PAL) BOARD, COMPLETE (SERVICE) (TRV33E)
108	A-7013-555-A	VA-118 (MDG) BOARD, COMPLETE
109	1-687-546-11	FP-621 FLEXIBLE BOARD
110	3-941-343-21	TAPE (A)
111	3-081-787-01	SHEET, RF

COVER

5. REPAIR PARTS LIST

5-1-4. LENS SECTION



Be sure to read “Precautions upon replacing CCD imager” on page 4-9 when changing the CCD imager.

Ref. No.	Part No.	Description
151	3-713-791-51	SCREW (M1.7X3.5), TAPPING, P2
152	X-3953-111-1	FRAME (40) ASSY, LENS
153	8-848-769-01	DEVICE, LENS LSV-751A
154	1-758-569-11	FILTER BLOCK, OPTICAL
155	3-053-973-01	RUBBER (W), SEAL
156	A-7013-527-A	CD-431 BOARD, COMPLETE
157	3-713-791-11	SCREW (M1.7X5), TAPPING, P2

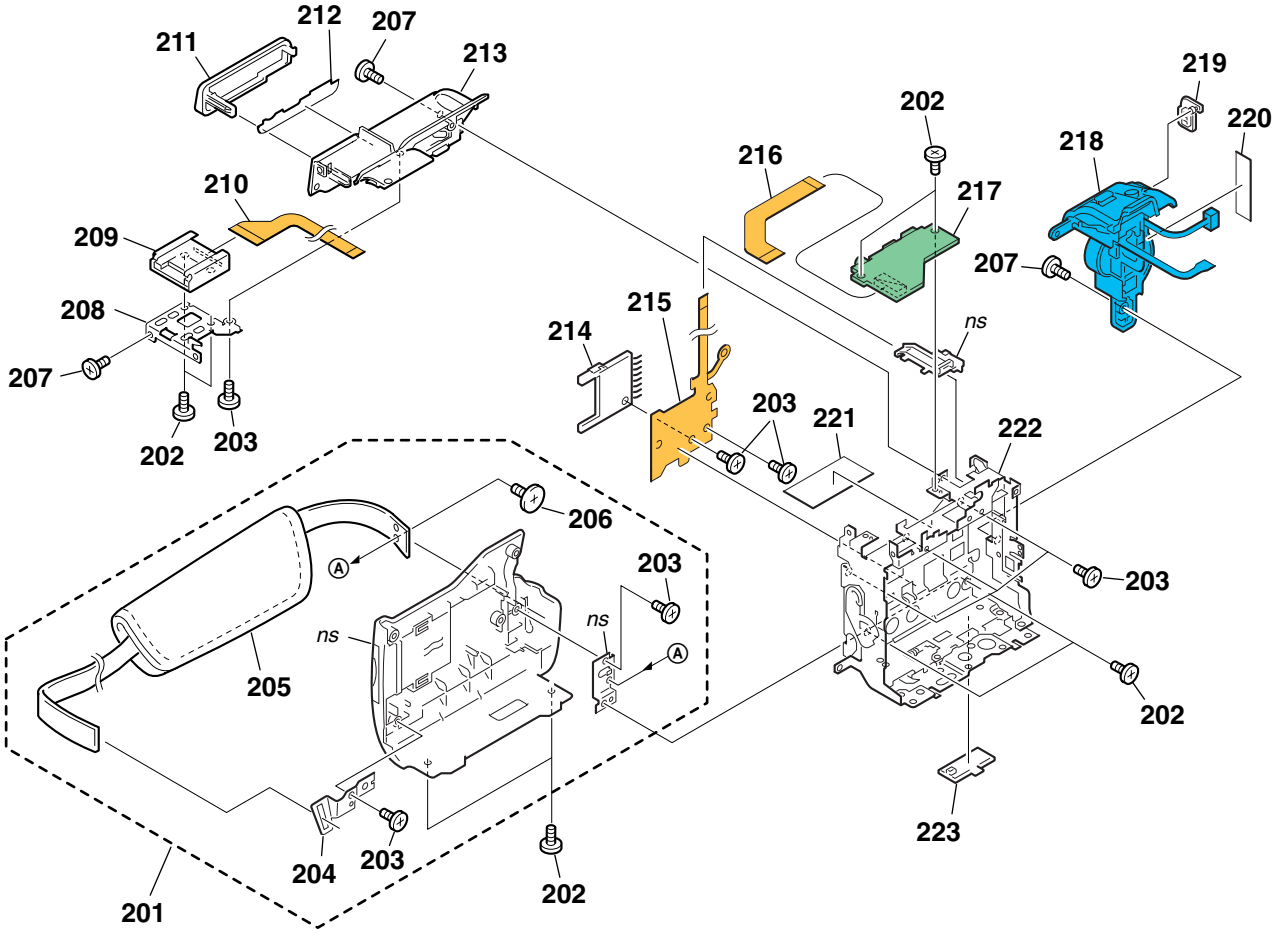
Ref. No.	Part No.	Description
158	1-687-548-11	FP-624 FLEXIBLE BOARD
159	3-081-700-01	SHEET (CD), RADIATION
160	3-080-566-01	HEAT SINK, CD
* 161	3-063-899-01	SHEET (S)
162	3-080-567-01	SHEET, CD RADIATION
163	3-080-568-01	SHEET (M),FLEXIBLE PROTECTION
IC5101	A-7031-359-A	CCD BLOCK ASSY (CCD IMAGER)

COVER

5. REPAIR PARTS LIST

5-1-5. CABINET L SECTION

ns : not supplied

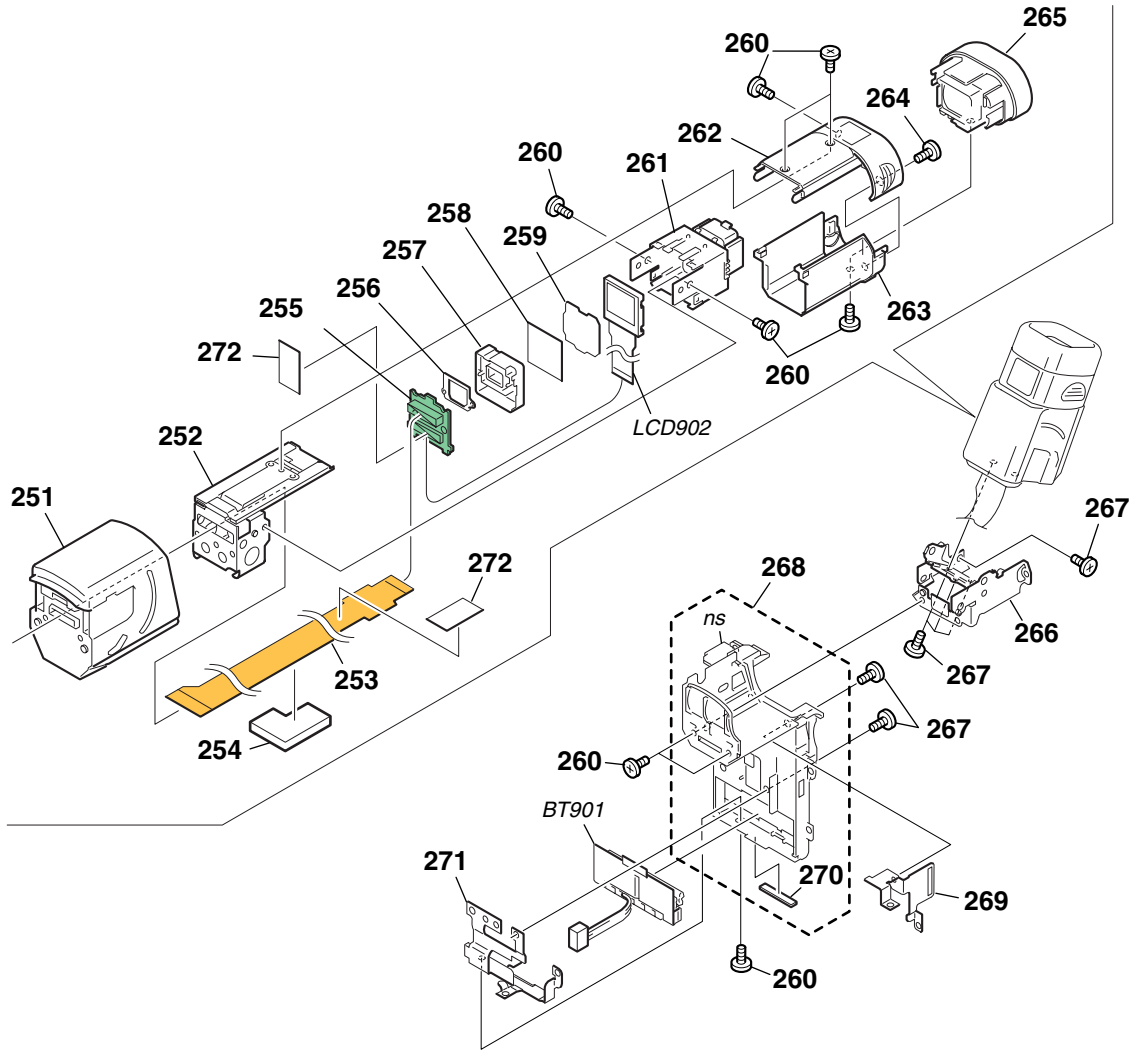


Ref. No.	Part No.	Description
201	X-3953-219-2	CABINET (G) ASSY (40E)
202	3-989-735-01	SCREW (M1.7), LOCK ACE, P2
203	3-713-791-51	SCREW (M1.7X3.5), TAPPING, P2
204	3-080-468-01	SHEET METAL (FRONT), GRIP BELT
205	3-080-467-01	BELT, GRIP
206	3-073-686-11	SCREW (M2X2.5)
207	3-989-735-81	SCREW (M1.7), LOCK ACE, P2
208	3-080-473-01	FRAME, SHOE
209	1-793-996-11	CONNECTOR, EXTERNAL
210	1-687-545-11	FP-620 FLEXIBLE BOARD
211	3-080-572-01	COVER (L), JACK
212	3-080-576-11	SHEET (L), JACK

Ref. No.	Part No.	Description
213	X-3953-218-1	CABINET (L) ASSY (40E)
214	1-815-795-11	CONNECTOR, MEMORY STCK
215	1-687-551-11	FP-630 FLEXIBLE BOARD
216	1-687-549-11	FP-625 FLEXIBLE BOARD
217	A-7013-551-A	JK-242 BOARD, COMPLETE
218	1-477-740-21	SWITCH BLOCK, CONTROL (FK-CX4000)
219	3-082-335-01	DC-IN JACK COVER (SERVICE)
220	3-076-631-01	RETAINER, FK FLEXIBLE
221	3-081-434-01	SHEET Z
222	X-3953-096-1	FRAME ASSY, CS
223	3-080-471-01	KNOB, EJECT

5-1-6. BT PANEL/EVF SECTION

ns : not supplied



Ref. No.	Part No.	Description
251	3-080-420-11	CABINET, VF TILT
252	X-3953-118-1	SLIDE ASSY, VF
253	1-687-544-21	FP-619 FLEXIBLE BOARD
254	3-081-694-02	RETAINER, EVF FLEXIBLE
255	A-7013-525-A	LB-085 (C) BOARD, COMPLETE
256	3-080-615-01	CUSHION (LB) (40)
257	3-080-618-01	GUIDE (40), LAMP
258	3-080-613-01	ILLUMINATOR (40)
259	3-080-614-01	SHEET (40), PRISM
260	3-989-735-01	SCREW (M1.7), LOCK ACE, P2
261	X-3953-119-1	CABINET ASSY, LCD
262	X-3953-117-1	CABINET (UPPER) ASSY, VF SLIDE

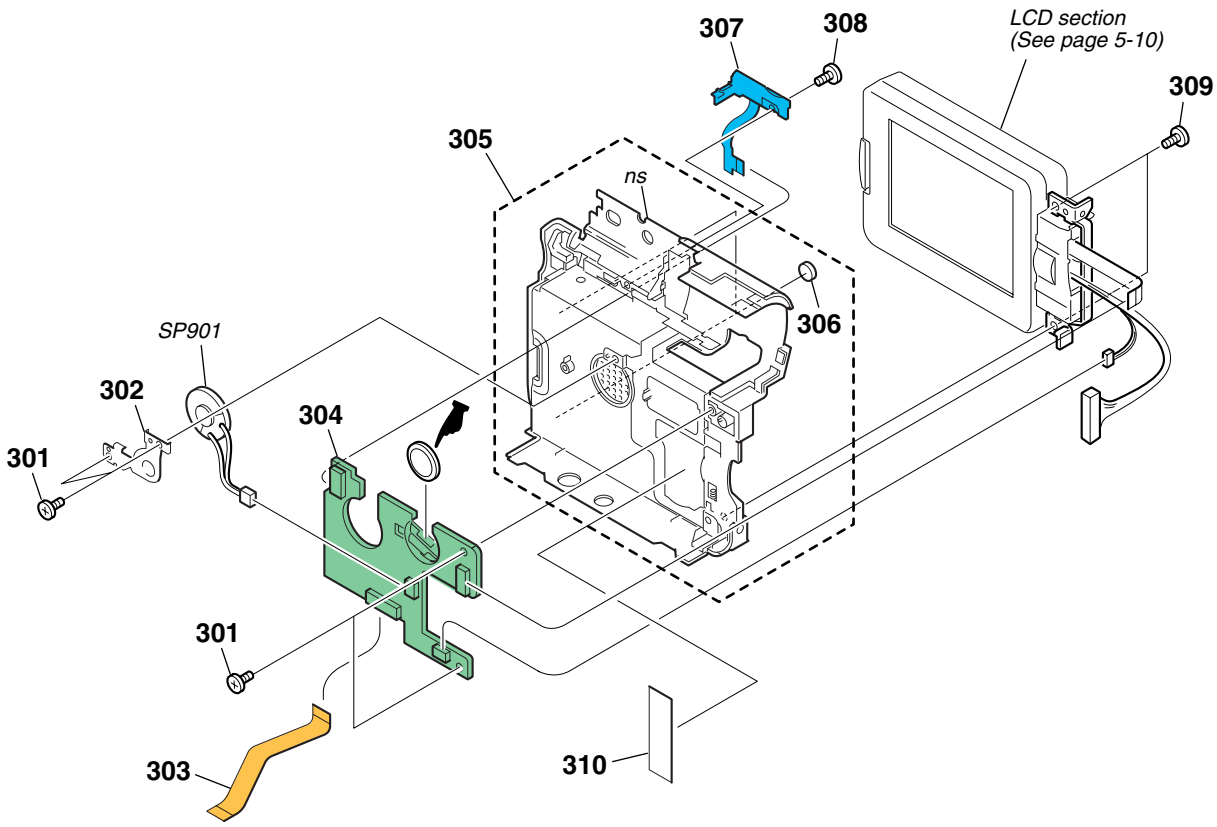
Ref. No.	Part No.	Description
263	3-080-617-01	CABINET (LOWER), VF SLIDE
264	3-713-791-51	SCREW (M1.7X3.5), TAPPING, P2
265	X-3953-115-1	EYE CUP (40) ASSY
266	X-3953-116-1	HINGE ASSY, VF
267	3-989-735-81	SCREW (M1.7), LOCK ACE, P2
268	X-3953-113-1	PANEL ASSY, BATTERY
269	X-3953-349-2	SHEET METAL (UPPER) ASSY STRAP
270	3-080-543-01	SHEET, FOOT
271	X-3953-114-1	SHEET METAL (LOWER) ASSY,STRAP
272	3-083-290-01	SHEET (VF)
BT901	1-694-796-11	TERMINAL BOARD, BATTERY
LCD902	8-753-028-47	LCX032AN-5

COVER

5. REPAIR PARTS LIST

5-1-7. CABINET R SECTION

ns : not supplied



: BT5201 (Lithium battery) CK-129 board on the mount position. (See page 4-77)

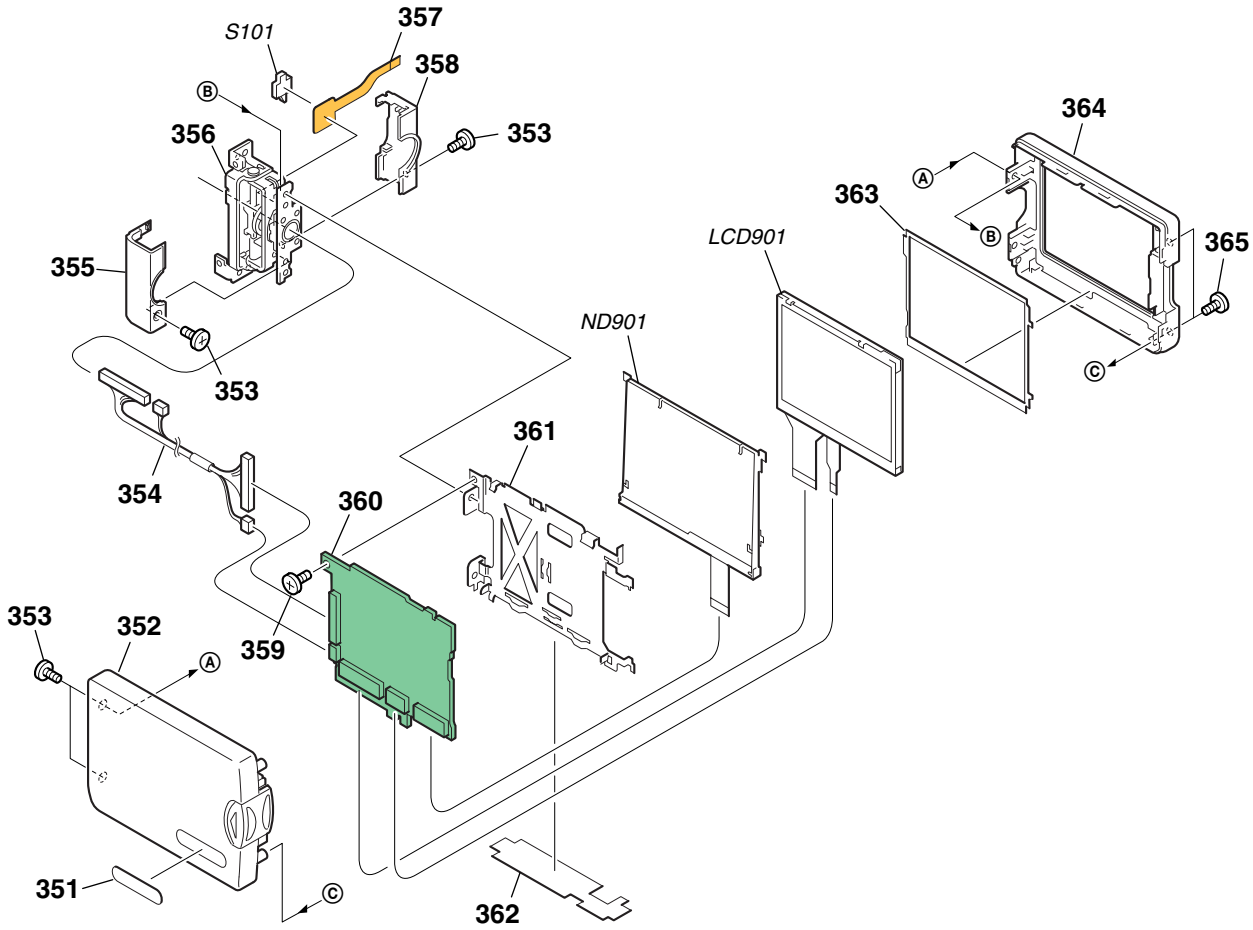
CAUTION :
Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type.

Ref. No.	Part No.	Description
301	3-713-791-51	SCREW (M1.7X3.5), TAPPING, P2
302	X-3953-097-1	RETAINER ASSY, SPEAKER
303	1-687-543-11	FP-618 FLEXIBLE BOARD
304	A-7013-534-A	CK-129 BOARD, COMPLETE
305	X-3953-095-1	CABINET (R) ASSY
306	3-959-978-02	CUSHION, PANEL

Ref. No.	Part No.	Description
307	1-477-741-11	SWITCH BLOCK, CONTROL (CF-CX4000)
308	3-989-735-01	SCREW (M1.7), LOCK ACE, P2
309	3-713-791-11	SCREW (M1.7X5), TAPPING, P2
310	3-941-343-21	TAPE (A)
SP901	1-825-260-21	LOUD SPEAKER (1.6CM)

5-1-8. LCD SECTION

ns : not supplied



Ref. No.	Part No.	Description
351	3-082-269-01	EMBLEM (M), P
352	X-3953-104-1	CABINET (C) ASSY (M), P
353	3-989-735-81	SCREW (M1.7), LOCK ACE, P2
354	1-962-081-11	HARNESS (PV-140)
355	3-080-387-11	COVER (C) (40), HINGE
356	X-3953-107-2	HINGE (40) ASSY
357	1-687-550-11	FP-626 FLEXIBLE BOARD
358	3-080-496-01	COVER (M) (40), HINGE
359	3-989-735-01	SCREW (M1.7), LOCK ACE, P2

Ref. No.	Part No.	Description
360	A-7013-528-A	PD-188 BOARD, COMPLETE
361	3-080-498-01	FRAME (40), PANEL
362	3-080-499-01	SHEET (40), INSULATING, LCD
363	3-080-497-01	CUSHION (T), LCD
364	X-3953-106-1	CABINET (M) (40) ASSY, P
365	3-713-791-11	SCREW (M1.7X5), TAPPING, P2
LCD901	8-753-052-10	ACX307AKM-1
⚠ND901	1-477-755-11	BLOCK LIGHT GUIDE PLATE (2.5)
S101	1-771-039-31	SWITCH, PUSH (PANEL REVERSE)

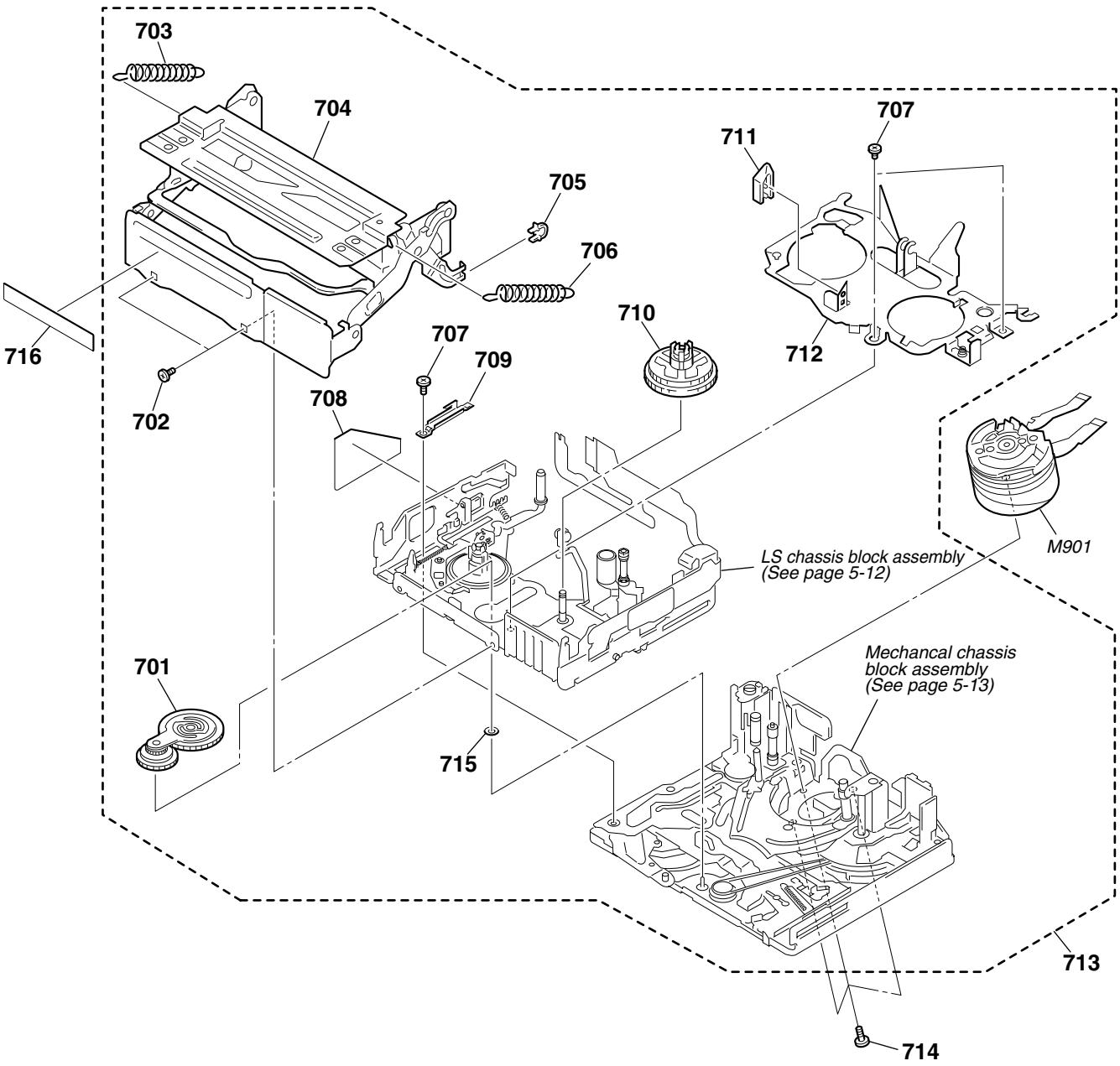
Note :
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Note :
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

COVER

5. REPAIR PARTS LIST

5-1-9. OVERALL (MECHANISM DECK-Z100)

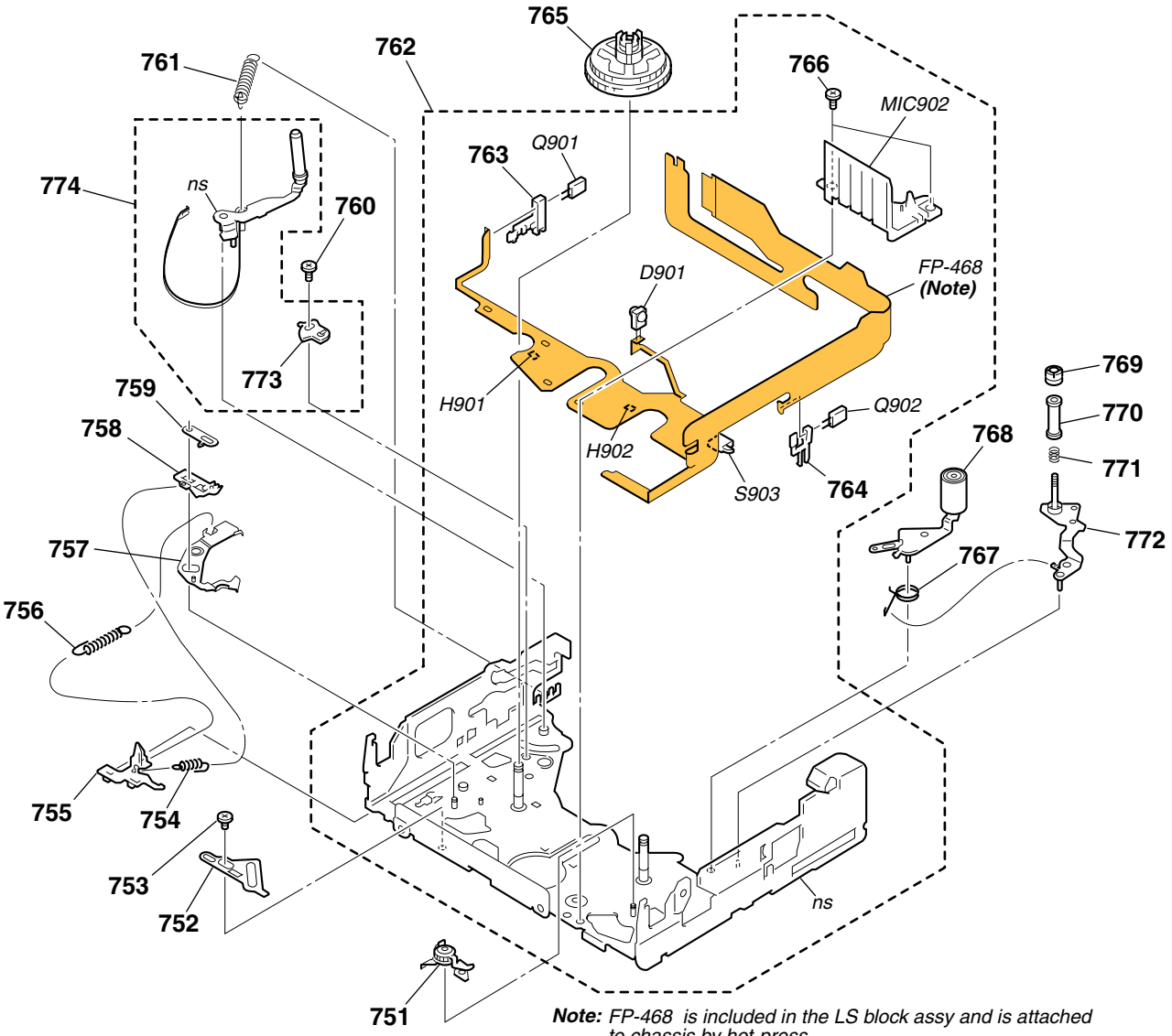


Ref. No.	Part No.	Description
701	X-3952-938-3	GEAR ASSY, GOOSENECK
702	3-075-097-11	SCREW (M1.4X1.4), SPECIAL HEAD
703	3-079-206-02	SPRING (POP UP S), TXTENSION
704	X-3952-939-3	COMPARTMENT ASSY, CASSETTE
705	3-079-367-02	DAMPER, CASSETTE COMPARTMENT
706	3-079-215-02	SPRING (POP UP T), EXTENSION
707	3-703-816-15	SCREW (M1.4), SPECIAL HEAD
708	3-080-545-01	COVER, SENSOR S

Ref. No.	Part No.	Description
709	3-079-364-01	RETAINER, LS GUIDE
710	X-3952-937-1	TABLE ASSY, T REEL
711	3-079-366-01	RELEASE, REEL LOCK
712	X-3953-257-1	PLATE ASSY,RETAINER
713	A-7095-393-A	MD (Z100) SUB ASSY
714	3-079-741-02	SCREW,DRUM FIXING
715	3-748-682-01	WASHER, T
716	3-081-221-01	LABEL (Z), LS
M901	A-7048-981-A	DRUM (DEH-30A-R) (SERVICE)

5-1-10. LS CHASSIS BLOCK ASSEMBLY

ns : not supplied



Note: *FP-468 is included in the LS block assy and is attached to chassis by hot-press.*
because installation of FP-468 requires a very high accuracy, FP-468 is hot supplied as an independent service parts.

Ref. No.	Part No.	Description
751	A-7095-402-B	BRAKE (T) BLOCK ASSY
752	3-079-241-01	PLATE, LS CAM
753	3-075-097-11	SCREW (M1.4X1.4), SPECIAL HEAD
754	3-079-246-01	SPRING(RELEASE RACK),EXTENSION
755	3-079-248-01	POSITIONING(S), CASSETTE
756	3-079-244-01	SPRING (ULE), EXTENSION
757	X-3952-932-2	BRAKE ASSY, ULE
758	3-079-245-01	RACK (S), RELEASE
759	3-079-247-01	BRAKE (S)
760	3-059-090-11	SCREW (M1.4X2.5), SPECIAL HEAD
761	3-079-242-01	SPRING, TENSION (TENSION REGULATOR)
762	A-7095-401-A	LS BLOCK ASSY
763	3-079-267-01	HOLDER (S), SENSOR
764	3-079-268-01	HOLDER (T), SENSOR
765	X-3952-936-2	TABLE ASSY, S REEL
766	3-703-816-15	SCREW (M1.4), SPECIAL HEAD

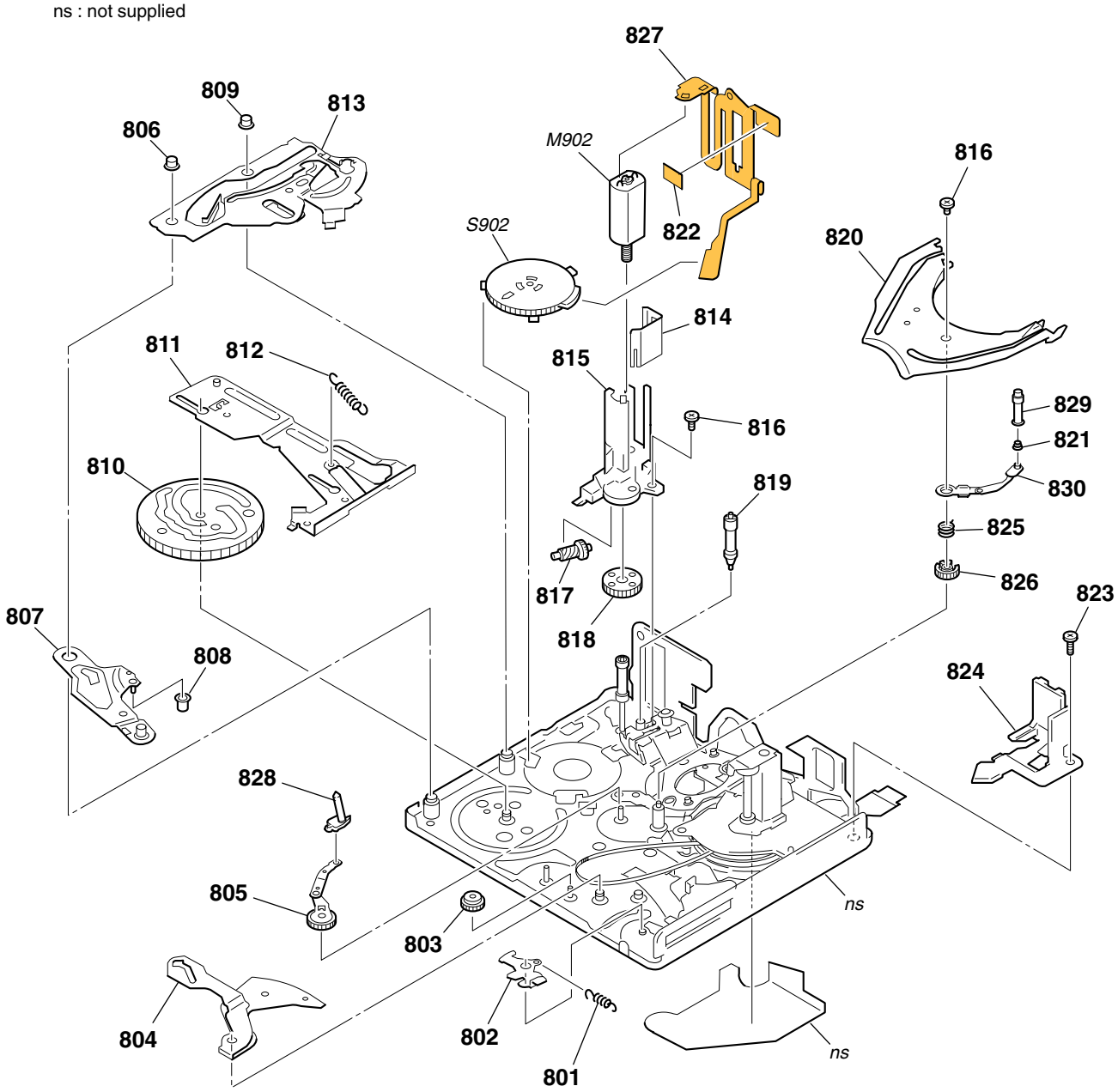
Ref. No.	Part No.	Description
767	3-079-243-02	SPRING (PINCH RETURN), TORSION
768	X-3952-934-1	ARM ASSY, PINCH
769	3-052-062-02	NUT, TG7
770	3-079-219-02	TG7
771	3-081-591-01	SPRING, COMPRESSION (TG7)
772	X-3952-935-3	ARM ASSY, TG7
773	3-079-237-01	ADJUSTOR, BAND
774	A-7095-403-B	TG2 ARM BLOCK ASSY
D901	6-500-652-01	DIODE GL453SE0000F (TAPE LED)
H901	8-719-067-74	ELEMENT, HOLE HW-105A-CDE-T (S REEL)
H902	8-719-067-74	ELEMENT, HOLE HW-105A-CDE-T (T REEL)
MIC902	1-817-175-12	PIN, CONNECTOR (WITH DETECTION SWITCH)
S903	1-529-566-51	SWITCH, PUSH (1 KEY) (C.C. DOWN)
Q901	6-550-402-01	TRANSISTOR PT4850FE000F (TAPE END)
Q902	6-550-402-01	TRANSISTOR PT4850FE000F (TAPE TOP)

COVER

5. REPAIR PARTS LIST

5-1-11. MECHANICAL CHASSIS BLOCK ASSEMBLY

ns : not supplied



Ref. No.	Part No.	Description
801	3-079-314-01	SPRING (EJ), EXTENSION
802	3-079-327-01	ARM, EJ
803	3-079-323-02	GEAR, CONVERSION
804	3-079-324-02	ARM, GL DRIVING
805	X-3952-928-1	GL (S) ASSY
806	3-079-315-01	ROLLER (S1), LS GUIDE
807	X-3952-925-2	ARM ASSY, LS
808	3-079-320-01	ROLLER, LS
809	3-079-316-01	ROLLER (S2), LS GUIDE
810	3-079-319-01	GEAR, CAM
811	X-3952-941-3	SLIDER ASSY, M
812	3-079-321-02	SPRING (PINCH), EXTENSION
813	X-3952-940-2	PLATE ASSY, TG2 CAM
814	3-079-312-01	SHIELD, MOTOR
815	3-079-307-01	HOLDER, MOTOR
816	3-703-816-15	SCREW (M1.4), SPECIAL HEAD

Ref. No.	Part No.	Description
817	3-079-308-01	SHAFT, WORM
818	3-079-309-01	GEAR, DECELERATION
819	X-3952-942-3	ROLLER ASSY, TG3
820	3-079-325-01	RAIL, GUIDE
821	3-079-295-02	SPRING, TG5
822	1-677-049-11	FP-228 FLEXIBLE BOARD (DEW SENSOR)
823	3-079-328-01	SCREW ,SPECIAL (EG GRIP)
824	3-079-326-02	SUPPORT, TG7
825	3-079-301-01	SPRING (GLT), TORSION
826	3-079-298-01	GEAR (T), GL
827	1-686-798-11	FP-467 FLEXIBLE BOARD
828	X-3952-927-2	COASTER (S) ASSY
829	X-3952-930-4	ROLLER ASSY, TG5
830	X-3952-929-3	COASTER (T) ASSY
M902	A-7095-396-A	MOTOR BLOCK ASSY, L (LOADING)
S902	1-477-679-11	ROTARY, ENCODER (SWITCH)

5-2. ELECTRICAL PARTS LIST

Ref. No.	Part No.	Description			
	A-7013-527-A	CD-431 BOARD, COMPLETE			
		**********			
		(IC5101 is not included in this COMPLETE board)			
		< CAPACITOR >			
C5101	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C5102	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C5103	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5105	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5106	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C5108	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5110	1-113-987-11	TANTAL. CHIP	4.7uF	20%	25V
C5111	1-104-851-11	TANTAL. CHIP	10uF	20%	10V
C5112	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C5113	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5114	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C5116	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
		< CONNECTOR >			
CN5101	1-691-360-11	CONNECTOR, FFC/FPC (ZIF) 22P			
		< FERRITE BEAD >			
FB5101	1-414-445-11	FERRITE	0uH		
		< IC >			
IC5101	A-7031-359-A	CCD BLOCK ASSY (CCD IMAGER)			
IC5102	6-701-755-01	IC AD80017AJRURL			
		< COIL >			
L5101	1-469-528-91	INDUCTOR	100uH		
L5102	1-469-525-91	INDUCTOR	10uH		
		< TRANSISTOR >			
Q5101	6-550-119-01	TRANSISTOR	DTC144EMT2L		
Q5101	6-550-234-01	TRANSISTOR	UNR32A300LS0		
		< RESISTOR >			
R5101	1-218-990-11	SHORT CHIP	0		
R5102	1-218-990-11	SHORT CHIP	0		
	A-7013-534-A	CK-129 BOARD, COMPLETE			
		**********			
		< BATTERY >			
BT5201	1-756-128-11	BATTERY, LITHIUM (SECONDARY)			
		< CONNECTOR >			
CN5205	1-778-506-21	PIN, CONNECTOR (PC BOARD) 2P			
CN5207	1-766-866-21	CONNECTOR, FFC/FPC 6P			
CN5208	1-691-354-21	CONNECTOR, FFC/FPC (ZIF) 16P			
CN5209	1-766-336-21	CONNECTOR, FFC/FPC 6P			
CN5210	1-794-376-21	PIN, CONNECTOR 4P			
		< DIODE >			
D5203	8-719-056-85	DIODE UDZSTE-178.2B			
D5205	6-500-289-01	DIODE MAZW082H0LS0			
		< RESISTOR >			
R5201	1-218-953-11	RES-CHIP	1K	5%	1/16W
R5223	1-218-945-11	RES-CHIP	220	5%	1/16W
		< SWITCH >			
S5203	1-771-138-82	SWITCH, KEY BOARD (RESET)			
S5207	1-762-805-21	SWITCH, PUSH (1 KEY) (PANEL_XCLOSE/OPEN)			
	1-687-550-11	FP-626 FLEXIBLE BOARD, COMPLETE			
		**********			
		< SWITCH >			
S101	1-771-039-31	SWITCH, PUSH (PANEL_REVERSE)			
	A-7013-551-A	JK-242 BOARD, COMPLETE			
		**********			
		< CONNECTOR >			
CN5301	1-794-962-11	CONNECTOR, SQUARE TYPE(USB 5P)(USB))			
CN5302	1-794-276-11	CONNECTOR, SQUARE TYPE 4P (DV Interface)			
CN5303	1-691-380-21	CONNECTOR, FFC/FPC 16P			
		< DIODE >			
D5302	8-719-062-16	DIODE 01ZA8.2(TPL3)			
D5304	8-719-078-02	DIODE 1SS357(T3SONY1)			
		< FERRITE BEAD >			
FB5301	1-500-444-11	FERRITE	0uH		
FB5302	1-500-444-11	FERRITE	0uH		
		< JACK >			
J5301	1-778-040-11	JACK, SMALL TYPE (AUDIO/VIDEO)			
		< LINE FILTER >			
LF5301	1-419-983-21	INDUCTOR	0uH		
		< RESISTOR >			
R5304	1-218-977-11	RES-CHIP	100K	5%	1/16W
R5305	1-218-979-11	RES-CHIP	150K	5%	1/16W
R5306	1-216-864-11	METAL CHIP	0	5%	1/16W
		< VARISTOR >			
VD5301	1-803-974-21	VARISTOR, CHIP (1608)			
VD5302	1-803-974-21	VARISTOR, CHIP (1608)			
VD5303	1-803-974-21	VARISTOR, CHIP (1608)			

Be sure to read “Precautions upon replacing CCD imager” on page 4-9 when changing the CCD imager.

CAUTION :
Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type.

Ref. No.	Part No.	Description			
	A-7013-525-A	LB-085 BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C5601	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5602	1-164-505-11	CERAMIC CHIP	2.2uF		16V
		< CONNECTOR >			
CN5601	1-779-334-11	CONNECTOR, FFC/FPC 20P			
CN5602	1-691-354-21	CONNECTOR, FFC/FPC (ZIF) 16P			
		< DIODE >			
D5602	6-500-375-01	DIODE NSCW455T-TC9			
		< IC >			
IC5601	8-759-581-11	IC NJM2125F(TE2)			
		< TRANSISTOR >			
Q5602	8-759-054-48	TRANSISTOR	UP04601008S0		
		< RESISTOR >			
R5603	1-208-941-11	METAL CHIP	180K	0.5%	1/16W
R5604	1-208-719-11	METAL CHIP	33K	0.5%	1/16W
R5605	1-218-956-11	RES-CHIP	1.8K	5%	1/16W
R5606	1-216-839-11	METAL CHIP	33K	5%	1/16W
R5607	1-211-983-11	METAL CHIP	39	0.5%	1/10W
	A-7013-530-A	MA-421 BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C5404	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C5501	1-107-819-11	CERAMIC CHIP	0.022uF	10%	16V
C5502	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C5503	1-107-819-11	CERAMIC CHIP	0.022uF	10%	16V
C5504	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C5505	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C5506	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C5510	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C5511	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C5512	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
C5513	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
C5514	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C5516	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
C5517	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
C5519	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5520	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5521	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5523	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5528	1-164-942-11	CERAMIC CHIP	0.0068uF	10%	16V
C5529	1-164-942-11	CERAMIC CHIP	0.0068uF	10%	16V
C5532	1-119-750-11	TANTAL. CHIP	22uF	20%	6.3V
C5535	1-119-923-81	CERAMIC CHIP	0.047uF	10%	10V
C5537	1-119-923-81	CERAMIC CHIP	0.047uF	10%	10V

Ref. No.	Part No.	Description			
		< CONNECTOR >			
CN5401	1-778-507-21	PIN, CONNECTOR (PC BOARD) 4P			
CN5402	1-815-235-11	CONNECTOR, FFC/FPC (ZIF) 37P			
		< DIODE >			
D5401	6-500-506-01	DIODE TLRMV1021(T15SOY,F)			
D5403	6-500-289-01	DIODE MAZW082H0LS0			
D5404	8-719-073-01	DIODE MA111-(K8).S0			
D5405	6-500-512-01	DIODE CL-330IRS-X-TU			
D5407	6-500-506-01	DIODE TLRMV1021(T15SOY,F)			
D5408	8-719-056-85	DIODE UDZSTE-178.2B			
D5409	8-719-056-85	DIODE UDZSTE-178.2B			
D5410	8-719-056-85	DIODE UDZSTE-178.2B			
		< FERRITE BEAD >			
FB5401	1-469-179-21	FERRITE	0uH		
FB5402	1-469-179-21	FERRITE	0uH		
FB5403	1-469-179-21	FERRITE	0uH		
FB5404	1-469-179-21	FERRITE	0uH		
FB5405	1-500-444-11	FERRITE	0uH		
FB5406	1-500-444-11	FERRITE	0uH		
FB5407	1-500-444-11	FERRITE	0uH		
FB5408	1-500-444-11	FERRITE	0uH		
FB5409	1-500-444-11	FERRITE	0uH		
FB5410	1-500-444-11	FERRITE	0uH		
FB5411	1-500-444-11	FERRITE	0uH		
		< IC >			
IC5401	6-600-047-01	IC RS-670			
IC5501	8-759-679-11	IC BH7870AKV-E2			
		< JACK >			
J5401	1-691-737-41	JACK (SMALL TYPE) (MIC(PLUG IN POWER)			
J5402	1-793-995-11	JACK, SUPER SMALL TYPE (LANC)			
J5404	1-694-688-11	TERMINAL, S (S VIDEO)			
J5405	1-569-950-41	JACK (SMALL TYPE) (HEADPHONES)			
		< COIL >			
L5501	1-469-528-91	INDUCTOR	100uH		
		< RESISTOR >			
R5401	1-216-864-11	METAL CHIP	0	5%	1/16W
R5402	1-218-956-11	RES-CHIP	1.8K	5%	1/16W
R5403	1-216-864-11	METAL CHIP	0	5%	1/16W
R5405	1-216-805-11	METAL CHIP	47	5%	1/16W
R5406	1-218-956-11	RES-CHIP	1.8K	5%	1/16W
R5407	1-216-864-11	METAL CHIP	0	5%	1/16W
R5408	1-216-864-11	METAL CHIP	0	5%	1/16W
R5501	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R5502	1-218-958-11	RES-CHIP	2.7K	5%	1/16W
R5503	1-218-965-11	RES-CHIP	10K	5%	1/16W
R5504	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R5505	1-218-990-11	SHORT CHIP	0		
R5506	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R5507	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R5508	1-218-963-11	RES-CHIP	6.8K	5%	1/16W

Ref. No.	Part No.	Description			
R5509	1-218-963-11	RES-CHIP	6.8K	5%	1/16W
R5510	1-218-953-11	RES-CHIP	1K	5%	1/16W
R5511	1-218-953-11	RES-CHIP	1K	5%	1/16W
R5515	1-218-965-11	RES-CHIP	10K	5%	1/16W
R5517	1-218-965-11	RES-CHIP	10K	5%	1/16W
R5520	1-218-959-11	RES-CHIP	3.3K	5%	1/16W
R5521	1-218-959-11	RES-CHIP	3.3K	5%	1/16W
R5522	1-218-990-11	SHORT CHIP	0		
R5524	1-218-977-11	RES-CHIP	100K	5%	1/16W
R5525	1-218-966-11	RES-CHIP	12K	5%	1/16W
R5527	1-218-959-11	RES-CHIP	3.3K	5%	1/16W
R5530	1-218-990-11	SHORT CHIP	0		
R5531	1-218-990-11	SHORT CHIP	0		
R5532	1-218-990-11	SHORT CHIP	0		
R5533	1-218-990-11	SHORT CHIP	0		
R5534	1-218-990-11	SHORT CHIP	0		
		< SENSOR >			
SE5401	1-476-807-31	SENSOR, ANGULAR VELOCITY (YAW)			
SE5402	1-476-807-41	SENSOR, ANGULAR VELOCITY (PITCH)			
		< VARISTOR >			
VD5401	1-801-862-11	VARISTOR, CHIP (1608)			
VD5402	1-801-862-11	VARISTOR, CHIP (1608)			
VD5403	1-801-923-11	VARISTOR, CHIP (1608)			
VD5407	1-803-974-21	VARISTOR, CHIP (1608)			
VD5408	1-803-974-21	VARISTOR, CHIP (1608)			
VD5409	1-801-862-11	VARISTOR, CHIP (1608)			
VD5410	1-801-862-11	VARISTOR, CHIP (1608)			

	A-7013-528-A	PD-188 BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C6001	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C6002	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C6003	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C6004	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C6005	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C6007	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C6008	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C6009	1-135-177-21	TANTALUM CHIP	1uF	20%	20V
C6010	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C6011	1-164-739-11	CERAMIC CHIP	560PF	5%	50V
C6012	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C6013	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C6014	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C6015	1-164-870-11	CERAMIC CHIP	68PF	5%	50V
C6016	1-165-908-91	CERAMIC CHIP	1uF	10%	10V
C6017	1-165-908-91	CERAMIC CHIP	1uF	10%	10V
C6018	1-165-908-91	CERAMIC CHIP	1uF	10%	10V
C6019	1-115-566-11	CERAMIC CHIP	4.7uF	10%	10V
C6022	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C6023	1-109-982-11	CERAMIC CHIP	1uF	10%	10V

Ref. No.	Part No.	Description			
C6024	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C6101	1-115-566-11	CERAMIC CHIP	4.7uF	10%	10V
C6103	1-164-657-11	CERAMIC CHIP	0.015uF	10%	50V
C6104	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
⚠C6105	1-100-371-11	CERAMIC CHIP	12PF	5%	3.15KV
		< CONNECTOR >			
CN6001	1-815-031-11	CONNECTOR, FFC/FPC (ZIF) 24P			
CN6101	1-764-709-11	CONNECTOR, FFC/FPC (LIF) 10P			
CN6201	1-794-997-11	PIN, CONNECTOR 20P			
CN6202	1-794-376-21	PIN, CONNECTOR 4P			
CN6203	1-691-344-11	CONNECTOR, FFC/FPC (ZIF) 6P			
		< DIODE >			
D6001	8-719-084-47	DIODE 1SV290(TPL3)			
D6003	8-719-050-42	DIODE RD3.3UM-T1B			
D6103	8-719-073-01	DIODE MA111-(K8).S0			
D6201	8-719-056-85	DIODE UDZSTE-178.2B			
		< FERRITE BEAD >			
FB6001	1-414-760-21	FERRITE	0uH		
FB6002	1-414-760-21	FERRITE	0uH		
		< IC >			
IC6001	8-752-109-08	IC CXA3289BR-T4			
IC6002	8-752-407-33	IC CXD3512R-T4			
IC6101	8-759-564-49	IC TC7W53FU(TE12R)			
IC6102	8-759-075-70	IC TA75S393F-TE85R			
		< COIL >			
L6001	1-469-525-91	INDUCTOR	10uH		
L6002	1-412-949-21	INDUCTOR	6.8uH		
L6101	1-428-878-11	INDUCTOR	82uH		
		< TRANSISTOR >			
Q6001	8-729-053-53	TRANSISTOR	HN1B04FE-Y/GR(TPLR3)		
Q6002	8-729-053-53	TRANSISTOR	HN1B04FE-Y/GR(TPLR3)		
Q6003	6-550-234-01	TRANSISTOR	UNR32A300LS0		
Q6004	6-550-232-01	TRANSISTOR	2SA207800LS0		
Q6005	6-550-232-01	TRANSISTOR	2SA207800LS0		
Q6101	6-550-234-01	TRANSISTOR	UNR32A300LS0		
Q6102	6-550-065-01	TRANSISTOR	CPH5504-TL-E		
		< RESISTOR >			
R6001	1-208-931-11	METAL CHIP	68K	0.5%	1/16W
R6002	1-218-985-11	RES-CHIP	470K	5%	1/16W
R6003	1-218-953-11	RES-CHIP	1K	5%	1/16W
R6004	1-218-953-11	RES-CHIP	1K	5%	1/16W
R6006	1-218-958-11	RES-CHIP	2.7K	5%	1/16W
R6007	1-218-973-11	RES-CHIP	47K	5%	1/16W
R6008	1-218-973-11	RES-CHIP	47K	5%	1/16W
R6009	1-218-975-11	RES-CHIP	68K	5%	1/16W
R6010	1-218-969-11	RES-CHIP	22K	5%	1/16W
R6011	1-218-975-11	RES-CHIP	68K	5%	1/16W

Note :
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Note :
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description			
R6012	1-218-989-11	RES-CHIP	1M	5%	1/16W
R6013	1-218-977-11	RES-CHIP	100K	5%	1/16W
R6014	1-218-965-11	RES-CHIP	10K	5%	1/16W
R6015	1-218-965-11	RES-CHIP	10K	5%	1/16W
R6016	1-218-953-11	RES-CHIP	1K	5%	1/16W
R6017	1-218-973-11	RES-CHIP	47K	5%	1/16W
R6018	1-218-966-11	RES-CHIP	12K	5%	1/16W
R6019	1-218-989-11	RES-CHIP	1M	5%	1/16W
R6020	1-218-975-11	RES-CHIP	68K	5%	1/16W
R6021	1-218-979-11	RES-CHIP	150K	5%	1/16W
R6022	1-208-957-11	RES-CHIP	820K	5%	1/16W
R6023	1-218-990-11	SHORT CHIP	0		
R6103	1-218-965-11	RES-CHIP	10K	5%	1/16W
R6104	1-218-980-11	RES-CHIP	180K	5%	1/16W
R6105	1-218-969-11	RES-CHIP	22K	5%	1/16W
R6106	1-216-055-00	METAL CHIP	1.8K	5%	1/10W
R6107	1-218-965-11	RES-CHIP	10K	5%	1/16W
R6108	1-218-969-11	RES-CHIP	22K	5%	1/16W
R6110	1-218-949-11	RES-CHIP	470	5%	1/16W
		< COMPOSITION CIRCUIT BLOCK >			
RB6001	1-234-372-21	RES, NETWORK 100X4		(1005)	
		< TRANSFORMER >			
⚠T6101	1-435-786-31	TRANSFORMER, INVERTER			
	A-7013-555-A	VA-118 BOARD, COMPLETE **********			
		< CAPACITOR >			
C4001	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C4002	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C4003	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C4005	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C4109	1-119-749-11	TANTAL. CHIP	33uF	20%	4V
C4110	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C4111	1-162-969-11	CERAMIC CHIP	0.0068uF	10%	25V
C4112	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C4113	1-164-854-11	CERAMIC CHIP	15PF	5%	50V
C4114	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C4115	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C4116	1-164-854-11	CERAMIC CHIP	15PF	5%	50V
C4117	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C4201	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C4203	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C4204	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C4205	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C4206	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C4207	1-164-739-11	CERAMIC CHIP	560PF	5%	50V
C4208	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C4209	1-113-986-11	TANTAL. CHIP	2.2uF	20%	25V
C4210	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C4211	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C4212	1-164-876-11	CERAMIC CHIP	120PF	5%	50V
C4213	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V

Ref. No.	Part No.	Description			
C4214	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C4215	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C4216	1-109-994-11	CERAMIC CHIP	2.2uF	10%	10V
C4217	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C4301	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C4302	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C4303	1-104-847-11	TANTAL. CHIP	22uF	20%	4V
C4304	1-104-847-11	TANTAL. CHIP	22uF	20%	4V
C4305	1-119-923-81	CERAMIC CHIP	0.047uF	10%	10V
C4306	1-119-923-81	CERAMIC CHIP	0.047uF	10%	10V
C4307	1-119-923-81	CERAMIC CHIP	0.047uF	10%	10V
C4308	1-119-923-81	CERAMIC CHIP	0.047uF	10%	10V
C4309	1-137-710-11	CERAMIC CHIP	10uF	20%	6.3V
C4310	1-137-710-11	CERAMIC CHIP	10uF	20%	6.3V
C4311	1-137-710-11	CERAMIC CHIP	10uF	20%	6.3V
C4312	1-137-710-11	CERAMIC CHIP	10uF	20%	6.3V
C4314	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C4501	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C4502	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C4503	1-107-819-11	CERAMIC CHIP	0.022uF	10%	16V
C4504	1-164-941-11	CERAMIC CHIP	0.0047uF	10%	16V
C4505	1-119-923-81	CERAMIC CHIP	0.047uF	10%	10V
C4506	1-119-923-81	CERAMIC CHIP	0.047uF	10%	10V
C4507	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C4508	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C4509	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C4510	1-164-934-11	CERAMIC CHIP	330PF	10%	50V
C4511	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C4512	1-165-908-91	CERAMIC CHIP	1uF	10%	10V
C4513	1-107-819-11	CERAMIC CHIP	0.022uF	10%	16V
C4514	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C4515	1-165-908-91	CERAMIC CHIP	1uF	10%	10V
C4516	1-107-819-11	CERAMIC CHIP	0.022uF	10%	16V
C4517	1-119-923-81	CERAMIC CHIP	0.047uF	10%	10V
C4518	1-165-875-11	CERAMIC CHIP	10uF	10%	10V
C4520	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C4521	1-115-566-11	CERAMIC CHIP	4.7uF	10%	10V
C4522	1-115-566-11	CERAMIC CHIP	4.7uF	10%	10V
C4523	1-125-838-11	CERAMIC CHIP	2.2uF	10%	6.3V
C4526	1-115-566-11	CERAMIC CHIP	4.7uF	10%	10V
C4527	1-127-861-11	CERAMIC CHIP	2.2uF	10%	16V
C4528	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C4529	1-115-566-11	CERAMIC CHIP	4.7uF	10%	10V
C4530	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C4531	1-115-566-11	CERAMIC CHIP	4.7uF	10%	10V
C4532	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C4533	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C4535	1-115-566-11	CERAMIC CHIP	4.7uF	10%	10V
C4536	1-115-566-11	CERAMIC CHIP	4.7uF	10%	10V
C4537	1-127-861-11	CERAMIC CHIP	2.2uF	10%	16V
C4538	1-119-750-11	TANTAL. CHIP	22uF	20%	6.3V
C4539	1-104-851-11	TANTAL. CHIP	10uF	20%	10V
C4540	1-125-827-91	CERAMIC CHIP	1uF	10%	25V
C4541	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C4542	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V

Note :
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Note :
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

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Ref. No.	Part No.	Description			
C4543	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C4544	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C4545	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C4546	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C4547	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C4548	1-119-750-11	TANTAL. CHIP	22uF	20%	6.3V
C4549	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C4550	1-113-988-11	TANTAL. CHIP	68uF	20%	4V
C4551	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C4553	1-117-720-11	CERAMIC CHIP	4.7uF		10V
C4554	1-115-566-11	CERAMIC CHIP	4.7uF	10%	10V
C4555	1-164-506-11	CERAMIC CHIP	4.7uF		16V
C4557	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C4558	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C4559	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C4560	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C4562	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C4601	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C4602	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C4603	1-107-819-11	CERAMIC CHIP	0.022uF	10%	16V
C4604	1-119-751-11	TANTAL. CHIP	22uF	20%	16V
C4605	1-119-751-11	TANTAL. CHIP	22uF	20%	16V
C4606	1-119-751-11	TANTAL. CHIP	22uF	20%	16V
C4607	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
		< CONNECTOR >			
CN4001	1-691-374-11	CONNECTOR, FFC/FPC 10P			
CN4002	1-766-613-21	CONNECTOR, FFC/FPC 36P			
CN4003	1-794-998-31	PIN, CONNECTOR 20P			
CN4004	1-774-603-21	CONNECTOR, BOARD TO BOARD 100P			
CN4005	1-691-354-21	CONNECTOR, FFC/FPC (ZIF) 16P			
CN4201	1-766-350-21	CONNECTOR, FFC/FPC 20P			
* CN4602	1-580-056-21	PIN, CONNECTOR (SMD) 3P			
* CN4603	1-580-056-21	PIN, CONNECTOR (SMD) 3P			
		< DIODE >			
D4001	6-500-289-01	DIODE MAZW082H0LS0			
D4002	6-500-289-01	DIODE MAZW082H0LS0			
D4101	8-719-073-01	DIODE MA111-(K8).S0			
D4102	8-719-056-85	DIODE UDZSTE-178.2B			
D4103	8-719-056-85	DIODE UDZSTE-178.2B			
D4201	8-719-084-47	DIODE 1SV290(TPL3)			
D4502	8-719-421-27	DIODE MA728-(K8).S0			
D4503	6-500-314-01	DIODE DAN222MT2L			
D4504	8-719-074-08	DIODE MA4ZD03001S0			
D4507	8-719-074-08	DIODE MA4ZD03001S0			
D4601	6-500-289-01	DIODE MAZW082H0LS0			
D4602	8-719-081-19	DIODE 1SS383(T5RSONY1)			
D4603	8-719-056-23	DIODE 1SS387-TPL3			
D4604	8-719-056-23	DIODE 1SS387-TPL3			
		< FUSE >			
⚠F4601	1-576-406-21	FUSE 1.4A	32V		
⚠F4602	1-576-406-21	FUSE 1.4A	32V		
⚠F4603	1-576-406-21	FUSE 1.4A	32V		
⚠F4604	1-576-406-21	FUSE 1.4A	32V		
⚠F4605	1-576-406-21	FUSE 1.4A	32V		

Ref. No.	Part No.	Description	
		< FERRITE BEAD >	
FB4201	1-469-676-22	FERRITE	0uH
FB4202	1-500-329-21	FERRITE	0uH
		< IC >	
IC4101	6-803-026-01	IC MB89097PFV-G-155-BND-ER-E1	
IC4201	8-752-109-08	IC CXA3289BR-T4	
IC4202	8-752-405-57	IC CXD3501AR-T4	
IC4301	8-759-489-19	IC uPC6756GR-8JG-E2	
IC4502	6-703-429-01	IC MB44A120APFV-G-BND-ERE1	
IC4504	6-703-227-01	IC TK11131CSCL-G	
		< COIL >	
L4201	1-469-525-91	INDUCTOR	10uH
L4202	1-469-891-21	INDUCTOR	6.8uH
L4301	1-469-570-21	INDUCTOR	10uH
L4501	1-416-670-11	INDUCTOR	33uH
L4502	1-416-669-11	INDUCTOR	22uH
L4503	1-416-669-11	INDUCTOR	22uH
L4504	1-416-669-11	INDUCTOR	22uH
L4505	1-416-670-11	INDUCTOR	33uH
L4506	1-416-669-11	INDUCTOR	22uH
L4507	1-416-670-11	INDUCTOR	33uH
L4508	1-469-524-91	INDUCTOR	4.7uH
L4509	1-469-524-91	INDUCTOR	4.7uH
L4510	1-469-757-21	INDUCTOR	10uH
L4511	1-469-524-91	INDUCTOR	4.7uH
L4512	1-469-524-91	INDUCTOR	4.7uH
L4513	1-469-524-91	INDUCTOR	4.7uH
L4514	1-469-524-91	INDUCTOR	4.7uH
L4515	1-469-526-91	INDUCTOR	22uH
L4516	1-469-524-91	INDUCTOR	4.7uH
L4517	1-469-524-91	INDUCTOR	4.7uH
L4518	1-469-524-91	INDUCTOR	4.7uH
L4519	1-469-524-91	INDUCTOR	4.7uH
L4520	1-469-524-91	INDUCTOR	4.7uH
L4521	1-469-524-91	INDUCTOR	4.7uH
L4601	1-412-056-11	INDUCTOR	4.7uH
		< LINE FILTER >	
LF4602	1-456-391-21	INDUCTOR	0uH
		< TRANSISTOR >	
Q4001	6-550-102-01	TRANSISTOR	2SC5663T2L
Q4002	6-550-235-01	TRANSISTOR	UNR32A500LS0
Q4003	6-550-238-01	TRANSISTOR	UNR31A100LS0
Q4004	8-729-053-57	TRANSISTOR	RN1902FE(TPLR3)
Q4005	8-729-054-44	TRANSISTOR	RN2902FE(TPLR3)
Q4101	8-729-041-43	TRANSISTOR	HN1L02FU(TE85R)
Q4504	6-550-351-01	TRANSISTOR	CPH5812-TL-E
Q4505	6-550-405-01	TRANSISTOR	CPH5815-TL-E
Q4506	6-550-351-01	TRANSISTOR	CPH5812-TL-E
Q4507	6-550-559-01	TRANSISTOR	XN0NE9200LS0

Note :
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Note :
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description			
Q4508	6-550-351-01	TRANSISTOR	CPH5812-TL-E		
Q4509	6-550-405-01	TRANSISTOR	CPH5815-TL-E		
Q4510	6-550-560-01	TRANSISTOR	CPH5819-TL-E		
Q4513	6-550-237-01	TRANSISTOR	2SC584600LS0		
Q4514	8-729-101-07	TRANSISTOR	2SB798-T1-DLDK		
Q4515	6-550-237-01	TRANSISTOR	2SC584600LS0		
Q4516	6-550-232-01	TRANSISTOR	2SA207800LS0		
Q4517	6-550-232-01	TRANSISTOR	2SA2029T2LQ/R		
Q4518	8-759-054-50	TRANSISTOR	UP04501008S0		
Q4519	8-759-054-50	TRANSISTOR	UP04501008S0		
Q4520	6-550-237-01	TRANSISTOR	2SC584600LS0		
Q4521	8-729-054-49	TRANSISTOR	UP04401008S0		
Q4524	8-729-216-22	TRANSISTOR	2SA1162-YG-TE85L		
Q4525	8-759-054-50	TRANSISTOR	UP04501008S0		
Q4526	6-550-406-01	TRANSISTOR	MCH3335-S-TL-E		
Q4601	8-729-047-68	TRANSISTOR	SSM3K03FE(TPL3)		
Q4602	6-550-404-01	TRANSISTOR	UPA1858GR-9JG-E2-A		
Q4603	8-729-101-07	TRANSISTOR	2SB798-T1-DLDK		
Q4604	6-550-234-01	TRANSISTOR	UNR32A300LS0		
Q4608	8-729-056-19	TRANSISTOR	TPC6101(TE85R)		
Q4610	6-550-234-01	TRANSISTOR	UNR32A300LS0		
		< RESISTOR >			
R4002	1-218-953-11	RES-CHIP	1K	5%	1/16W
R4004	1-216-009-91	RES-CHIP	22	5%	1/10W
R4005	1-216-009-91	RES-CHIP	22	5%	1/10W
R4006	1-218-939-11	RES-CHIP	68	5%	1/16W
R4007	1-218-959-11	RES-CHIP	3.3K	5%	1/16W
R4008	1-218-990-11	SHORT CHIP	0		
R4009	1-218-990-11	SHORT CHIP	0		
R4103	1-218-989-11	RES-CHIP	1M	5%	1/16W
R4104	1-218-977-11	RES-CHIP	100K	5%	1/16W
R4105	1-218-990-11	SHORT CHIP	0		
R4106	1-218-973-11	RES-CHIP	47K	5%	1/16W
R4109	1-218-977-11	RES-CHIP	100K	5%	1/16W
R4110	1-218-977-11	RES-CHIP	100K	5%	1/16W
R4111	1-208-935-11	METAL CHIP	100K	0.5%	1/16W
R4112	1-218-989-11	METAL CHIP	1M	0.5%	1/16W
R4113	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R4114	1-219-570-11	METAL CHIP	10M	5%	1/10W
R4115	1-218-985-11	METAL CHIP	470K	0.5%	1/16W
R4116	1-208-927-11	METAL CHIP	47K	0.5%	1/16W
R4117	1-218-990-11	SHORT CHIP	0		
R4118	1-216-857-11	METAL CHIP	1M	5%	1/16W
R4119	1-218-949-11	RES-CHIP	470	5%	1/16W
R4120	1-218-977-11	RES-CHIP	100K	5%	1/16W
R4121	1-218-977-11	RES-CHIP	100K	5%	1/16W
R4122	1-218-977-11	RES-CHIP	100K	5%	1/16W
R4123	1-218-989-11	RES-CHIP	1M	5%	1/16W
R4124	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4201	1-218-985-11	RES-CHIP	470K	5%	1/16W
R4202	1-208-935-11	METAL CHIP	100K	0.5%	1/16W
R4204	1-218-990-11	SHORT CHIP	0		
R4206	1-218-958-11	RES-CHIP	2.7K	5%	1/16W
R4207	1-218-973-11	RES-CHIP	47K	5%	1/16W
R4208	1-218-975-11	RES-CHIP	68K	5%	1/16W
R4209	1-218-969-11	RES-CHIP	22K	5%	1/16W
R4210	1-218-975-11	RES-CHIP	68K	5%	1/16W

Ref. No.	Part No.	Description			
R4211	1-218-989-11	RES-CHIP	1M	5%	1/16W
R4212	1-218-977-11	RES-CHIP	100K	5%	1/16W
R4213	1-208-927-11	METAL CHIP	47K	0.5%	1/16W
R4214	1-218-989-11	METAL CHIP	1M	0.5%	1/16W
R4215	1-218-953-11	RES-CHIP	1K	5%	1/16W
R4301	1-218-989-11	RES-CHIP	1M	5%	1/16W
R4302	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4303	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4304	1-218-989-11	RES-CHIP	1M	5%	1/16W
R4501	1-220-200-81	RES-CHIP	30K	5%	1/16W
R4502	1-218-953-11	RES-CHIP	1K	5%	1/16W
R4503	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R4504	1-218-990-11	SHORT CHIP	0		
R4505	1-218-990-11	SHORT CHIP	0		
R4506	1-218-990-11	SHORT CHIP	0		
R4507	1-218-990-11	SHORT CHIP	0		
R4508	1-218-990-11	SHORT CHIP	0		
R4509	1-218-990-11	SHORT CHIP	0		
R4510	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R4511	1-218-970-11	RES-CHIP	27K	5%	1/16W
R4512	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4513	1-218-971-11	RES-CHIP	33K	5%	1/16W
R4514	1-218-972-11	RES-CHIP	39K	5%	1/16W
R4515	1-218-953-11	RES-CHIP	1K	5%	1/16W
R4516	1-218-953-11	RES-CHIP	1K	5%	1/16W
R4517	1-208-697-11	METAL CHIP	3.9K	0.5%	1/16W
R4518	1-208-910-11	RES-CHIP	9.1K	5%	1/16W
R4519	1-218-990-11	SHORT CHIP	0		
R4520	1-208-927-11	METAL CHIP	47K	0.5%	1/16W
R4522	1-218-990-11	SHORT CHIP	0		
R4523	1-218-977-11	RES-CHIP	100K	5%	1/16W
R4524	1-216-789-11	METAL CHIP	2.2	5%	1/16W
R4525	1-218-990-11	SHORT CHIP	0		
R4526	1-218-935-11	RES-CHIP	33	5%	1/16W
R4537	1-218-966-11	RES-CHIP	12K	5%	1/16W
R4538	1-218-977-11	RES-CHIP	100K	5%	1/16W
R4539	1-218-973-11	RES-CHIP	47K	5%	1/16W
R4540	1-218-973-11	RES-CHIP	47K	5%	1/16W
R4541	1-218-977-11	RES-CHIP	100K	5%	1/16W
R4543	1-218-977-11	RES-CHIP	100K	5%	1/16W
R4545	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R4546	1-218-969-11	RES-CHIP	22K	5%	1/16W
R4547	1-218-969-11	RES-CHIP	22K	5%	1/16W
R4549	1-218-969-11	RES-CHIP	22K	5%	1/16W
R4550	1-208-703-11	METAL CHIP	6.8K	0.5%	1/16W
R4551	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4552	1-208-935-11	METAL CHIP	100K	0.5%	1/16W
R4553	1-208-721-11	METAL CHIP	39K	0.5%	1/16W
R4554	1-208-703-11	METAL CHIP	6.8K	0.5%	1/16W
R4555	1-208-935-11	METAL CHIP	100K	0.5%	1/16W
R4556	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4557	1-208-943-11	METAL CHIP	220K	0.5%	1/16W
R4561	1-218-977-11	RES-CHIP	100K	5%	1/16W
R4562	1-218-949-11	RES-CHIP	470	5%	1/16W
R4563	1-208-703-11	METAL CHIP	6.8K	0.5%	1/16W
R4564	1-208-711-11	METAL CHIP	15K	0.5%	1/16W
R4567	1-218-990-11	SHORT CHIP	0		
R4601	1-218-953-11	RES-CHIP	1K	5%	1/16W
R4604	1-218-977-11	RES-CHIP	100K	5%	1/16W
R4605	1-218-989-11	RES-CHIP	1M	5%	1/16W

Ref. No.	Part No.	Description			
R4607	1-216-797-11	METAL CHIP	10	5%	1/16W
R4608	1-218-954-11	RES-CHIP	1.2K	5%	1/16W
R4609	1-218-963-11	RES-CHIP	6.8K	5%	1/16W
R4611	1-218-953-11	RES-CHIP	1K	5%	1/16W
R4614	1-218-989-11	RES-CHIP	1M	5%	1/16W
R4615	1-218-965-11	RES-CHIP	10K	5%	1/16W
		< COMPOSITION CIRCUIT BLOCK >			
RB4101	1-234-378-21	RES, NETWORK 10KX4		(1005)	
RB4104	1-234-375-21	RES, NETWORK 1KX4		(1005)	
RB4105	1-234-375-21	RES, NETWORK 1KX4		(1005)	
RB4106	1-234-375-21	RES, NETWORK 1KX4		(1005)	
RB4107	1-234-375-21	RES, NETWORK 1KX4		(1005)	
RB4108	1-234-375-21	RES, NETWORK 1KX4		(1005)	
RB4109	1-234-381-21	RES, NETWORK 100KX4		(1005)	
RB4201	1-234-372-21	RES, NETWORK 100X4		(1005)	
RB4301	1-234-379-21	RES, NETWORK 22KX4		(1005)	
		< VIBRATOR >			
X4101	1-760-458-21	VIBRATOR, CRYSTAL (32.768KHZ)			
X4102	1-795-244-11	VIBRATOR, CERAMIC (10MHz)			

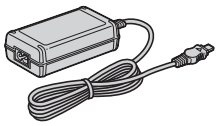
Ref. No.	Part No.	Description
	A-7016-142-A	VC-313 BOARD, COMPLETE (SERVICE)(TRV33)
		**********
	A-7016-330-A	VC-313 BOARD, COMPLETE (SERVICE)(TRV33E)
		**********

Electrical parts list of the VC-313 board are not shown.
Pages from 5-21 to 5-26 are not shown.

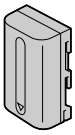
Checking supplied accessories.

Make sure that the following accessories are supplied with your camcorder.

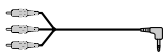
Power cord (Main lead)(1)
(AUS model)
⚠ 1-696-819-21
Power cord (Main lead)(1)
(AEP, E, EE, NE model)
⚠ 1-769-608-11
Power cord (Main lead)(1)
(CH model)
⚠ 1-782-476-11
Power cord (Main lead)(1)
(UK, HK model)
⚠ 1-783-374-11
Power cord (Main lead)(1)
(US, CND model)
⚠ 1-790-107-22
Power cord (Main lead)(1)
(JE model)
⚠ 1-790-732-11
Power cord (Main lead)(1)
(KR model)
⚠ 1-776-985-11



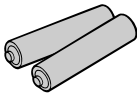
AC power adaptor (1) (AC-L15A)
(US,CND,AEP,UK,EE,NE,E,
AUS,HK,KR,JE model)
⚠ 1-477-533-31
AC power adaptor (1) (AC-L15B)
(CH model)
⚠ 1-477-533-41



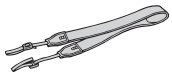
NP-FM30 battery pack (1)
⚠ A-7096-387-A
(US, CND model)
⚠ A-7096-388-B
(Except US, CND model)



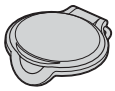
A/V connecting cable
(1.5m) (1)
1-824-097-11



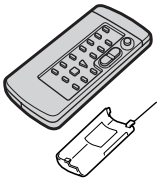
R6 (size AA) batteries
for the Remote
Commander (2)
(not supplied)



Shoulder strap (1)
3-987-015-01



Lens cap (1)
X-3953-088-1



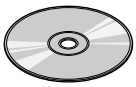
Lid Battery
Case
(3-742-854-01)

Wireless Remote Commander (1)
(RMT-814E)
1-475-141-61

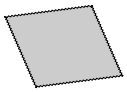
Shoe cover (1)
3-080-571-01

"Memory Stick" (1)
(MSA-8A)
A-7024-735-A

USB cable (1)
1-823-931-11

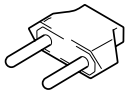


CD-ROM
(SPVD-008 USB Driver) (1)
(AEP, UK, EE, NE, E, HK, AUS,
JE, KR, CH model)
3-078-942-01
CD-ROM
(SPVD-008(I) USB Driver) (1)
(US,CND model)
3-078-943-01

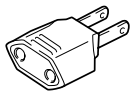


Cleaning cloth (1)
3-073-861-01

21-pin adaptor (1)
(AEP, UK, EE, NE
model)
1-770-783-21



2-pin conversion adaptor (1)
(TRV33:JE/TRV33E:JE
only)
1-569-007-12



2-pin conversion adaptor (1)
(TRV33:E,HK/TRV33E:E,HK
only)
1-569-008-12

• Abbreviation

CND	: Canadian model	AUS	: Australian model
EE	: East European model	CH	: Chinese model
NE	: North European model	JE	: Tourist model
HK	: Hong Kong model	KR	: Korea model

Other accessories

3-080-369-11 MANUAL, INSTRUCTION (ENGLISH) (TRV33:US,CND,E,HK,JE)
3-080-369-21 MANUAL, INSTRUCTION (FRENCH)(TRV33:CND)
3-080-369-31 MANUAL, INSTRUCTION (SPANISH/PORTUGUESE) (TRV33:E,JE)
3-080-369-41 MANUAL, INSTRUCTION (TRADITIONAL CHINESE) (TRV33:E,HK)
3-080-369-51 MANUAL, INSTRUCTION (KOREAN) (TRV33:JE,KR)
3-080-369-61 MANUAL, INSTRUCTION (ARABIC) (TRV33:E)
3-080-368-11 MANUAL, INSTRUCTION (ENGLISH/FRENCH) (TRV33E:AEP,UK,AUS,CH,HK,JE)
3-080-368-21 MANUAL, INSTRUCTION (SPANISH/PORTUGUESE) (TRV33E:AEP)
3-080-368-31 MANUAL, INSTRUCTION (ITALIAN/GREEK) (TRV33E:AEP)
3-080-368-41 MANUAL, INSTRUCTION (GERMAN/DUTCH) (TRV33E:AEP)
3-080-368-51 MANUAL, INSTRUCTION (SWEDISH/RUSSIAN) (TRV33E:NE,E,JE)
3-080-368-61 MANUAL, INSTRUCTION (DANISH/FINNISH) (TRV33E:NE)
3-080-368-71 MANUAL, INSTRUCTION (ARABIC/PERSIAN) (TRV33E:E)
3-080-368-81 MANUAL, INSTRUCTION (TRADITIONAL CHINESE) (TRV33E:HK)
3-080-368-91 MANUAL, INSTRUCTION (SIMPLIFIED CHINESE) (TRV33E:E,CH,JE)

Note : The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	**Note :** Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

9-876-223-31

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DCR-TRV33/TRV33E

RMT-814

SONY

LEVEL 2

SERVICE MANUAL

Ver 1.2 2003. 09

US Model
Canadian Model
Korea Model
DCR-TRV33
AEP Model
UK Model
North European Model
East European Model
Chinese Model
Australian Model
DCR-TRV33E
E Model
Hong Kong Model
Tourist Model
DCR-TRV33/TRV33E

SUPPLEMENT-1

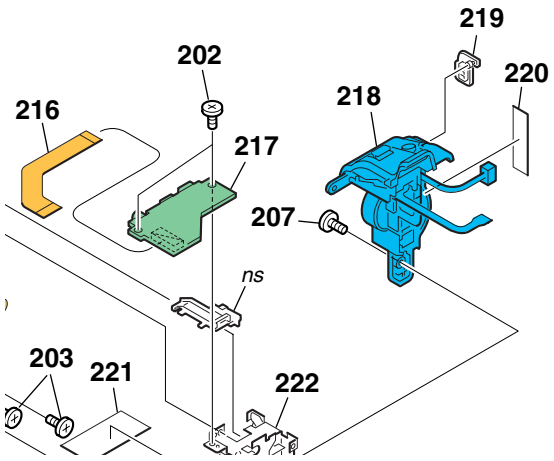
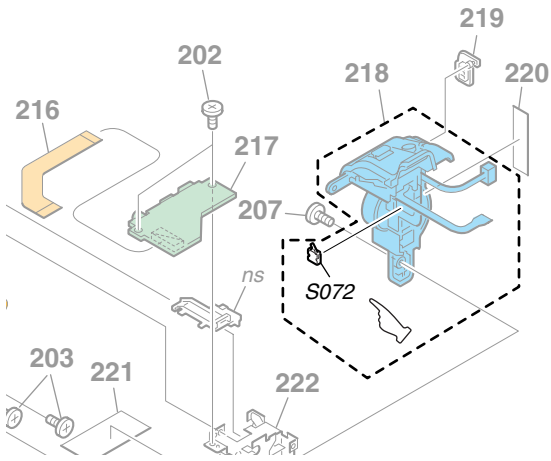
File this supplement-1 with the Service Manual.

Subject : Addition of supplied parts

SECTION 5 REPAIR PARTS LIST

5-1. EXPLODED VIEWS

☞ : Added portion.

Page	Before Change	After Change
5-7	**5-1-5. CABINET L SECTION**  Ref. No. Part No. Description —— ———— ————	 Ref. No. Part No. Description S072 1-786-179-41 SWITCH, PUSH (1KEY) (OPEN/⏏EJECT)

9-876-223-81

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DCR-TRV33/TRV33E

RMT-814

SONY

LEVEL 2

SERVICE MANUAL

Ver 1.4 2004. 09

US Model
Canadian Model
Korea Model
DCR-TRV33
AEP Model
UK Model
North European Model
East European Model
Chinese Model
Australian Model
DCR-TRV33E
E Model
Hong Kong Model
Tourist Model
DCR-TRV33/TRV33E

SUPPLEMENT-2

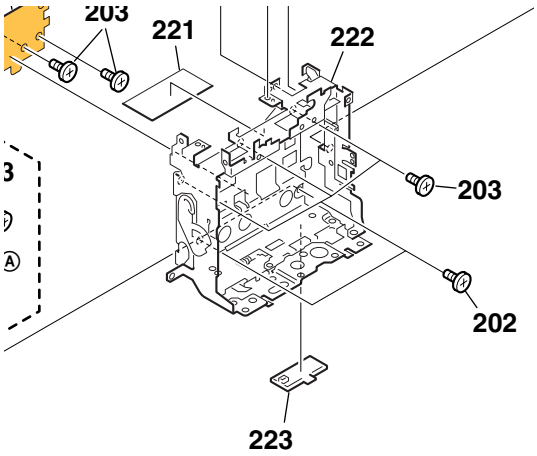
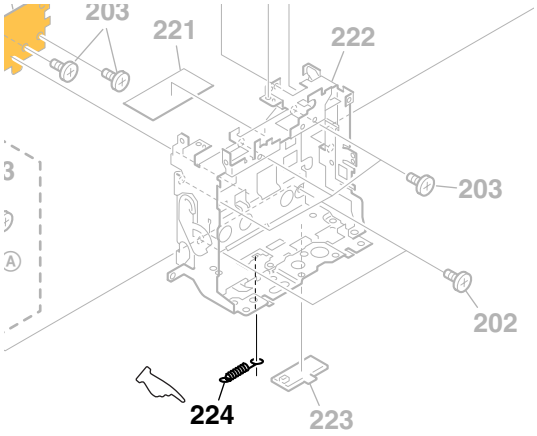
File this supplement-2 with the service manual.
(PV04-018)

• Addition of supplied parts

SECTION 5 REPAIR PARTS LIST

5-1. EXPLODED VIEWS

: Added portion

Page	Before change	After change
5-7	**5-1-5. CABINET L SECTION**  Ref. No. Part No. Description ——— ——— ———	 Ref. No. Part No. Description 224 3-080-451-02 SPRING, EXTENSION

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Revision History

Ver.	Date	History	Contents	S.M. Rev. issued
1.0	2003.02	Official Release	—	—
1.1	2003.06	Correction-1	Change of the parts S.M. Correction: Page 5-9, Page 5-11, Page 5-27	Yes
1.2	2003.09	Supplement-1	Addition of supplied parts	No
1.3	2003.11	Correction-2	Correction of the SELF-DIAGNOSIS CODE TABLE. S.M. correction: Page 1-3	Yes
1.4	2004.09	Supplement-2	Addition of supplied parts	No